





SETTER AND WOODCOCK.

N. ORR & CO. S^{rs}

THE DOG.

BY

DINKS, MAYHEW, AND HUTCHINSON.

Herbert
"

COMPILED, ABRIDGED, EDITED, AND ILLUSTRATED

BY

FRANK FORESTER,

presd. of
(H.W. Woodward)
AUTHOR OF "FIELD SPORTS," "FISH AND FISHING," "HORSES AND HORSEMANSHIP
OF THE UNITED STATES AND BRITISH PROVINCES," "THE COMPLETE
MANUAL FOR YOUNG SPORTSMEN," ETC., ETC.

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EDITOR'S PREFACE.

IN offering to the American public a new edition of DINKS and MAYHEW on the Dog, which, I am happy to find, is largely called for, I have been induced to make a further addition, which will, I think, render this the most perfect and comprehensive work in existence for the dog fancier and dog lover.

For myself I claim no merit, since, with the exception of one or two trivial changes in unimportant recipes in DINKS, and some abridgment of the last admirable work of Col. HUTCHINSON on Dog Breaking, which is now included in this volume, I have found occasion to make no alterations whatever, and, save a few notes, no additions.

I will add, in brief, that while I believe the little manual of Dinks to be the best short and brief compendium on the Dog, particularly as regards his breeding, conditioning, kennel and field management, and general specialities, there can be no possible doubt that Mayhew's pages are the *ne plus ultra* of canine pathology. There is nothing comparable to his treatment of all diseases for gentleness, simplicity, mercy to the animal, and effect. I have no hesitation in saying, that any person with sufficient intelligence to make a diagnosis according to his showing of the symptoms, and patience to exhibit his reme-

dies, precisely according to his directions, cannot fail of success.

I have this year treated, myself, two very unusually severe cases of distemper, one of acute dysentery, one of chronic diarrhœa, and one of most aggravated mange, implicitly after his instructions, and that with perfect, and, in three instances, most unexpected, success. The cases of distemper were got rid of with less suffering to the animals, and with less—in fact, no—prostration or emaciation than I have ever before witnessed.

I shall never attempt any practice other than that of Mayhew, for distemper; and, as he says, I am satisfied it is true, that no dog, taken in time, and treated by his rules, *need* die of this disease.

Colonel Hutchinson's volume, which is to dog-breaking, what Mayhew's is to dog-medicining—science, experience, patience, temper, gentleness, and judgment, against brute force and unreasoning ignorance—I have so far abridged as to omit, while retaining all the rules and precepts, such anecdotes of the habits, tricks, faults, and perfections of individual animals, and the discursive matter relative to Indian field sports, and general education of animals, as, however interesting in themselves, have no particular utility to the dog-breaker or sportsman in America. Beyond this I have done no more than to change the word September to the more general term of Autumn, in the heading of the chapters, and to add a few short notes, explanatory of the differences and comparative relations of English and American game.

I will conclude by observing, that although this work is exclusively on breaking for English shooting, there is not one word in it, which is not applicable to this country.

The methods of woodcock and snipe shooting are exactly the same in both countries, excepting only that in England there is no summer-cock shooting. Otherwise, the practice, the rules, and the qualifications of dogs are identical.

The partridge, in England, varies in few of its habits from our quail—I might almost say in none—unless that it prefers turnip fields, potatoe fields, long clover, standing beans, and the like, to bushy coverts and underwood among tall timber, and that it never takes to the tree. Like our quail, it must be hunted for and found in the open, and marked into, and followed up in, its covert, whatever that may be.

In like manner, English and American grouse-shooting may be regarded as identical, except that the former is practised on heathery mountains, the latter on grassy plains; and that pointers are preferable on the latter, owing to the drought and want of water, and to a particular kind of prickly burr, which terribly afflicts the long-haired setter. The same qualities and performances constitute the excellence of dogs for either sport, and, as there the moors, so here the prairies, are, beyond all doubt, the true field for carrying the art of dog-breaking to perfection.

To pheasant shooting we have nothing perfectly analogous. Indeed, the only sport in North America which at all resembles it, is ruffed-grouse shooting.

where they abound sufficiently to make it worth the sportsman's while to pursue them alone. Where they do so, there is no difference in the mode of pursuing the two birds, however dissimilar they may be in their other habits and peculiarities.

Bearing these facts in mind, the American sportsman will have no difficulty in applying all the rules given in the admirable work in question ; and the American dog-breaker can by no other means produce so perfect an animal for his pains, with so little distress to himself or his pupil.

The greatest drawback to the pleasures of dog-keeping and sporting, are the occasional sufferings of the animals, when diseased, which the owner cannot relieve, and the occasional severity with which he believes himself at times compelled to punish his friend and servant.

It may be said that, for the careful student of this volume, as it is now given entire, in its three separate parts, who has time, temper, patience, and firmness, to follow out its precepts to the letter, this drawback is abolished.

The writers are—all the three—good friends to that best of the friends of man, the faithful dog ; and I feel some claim to a share in their well-doing, and to the gratitude of the good animal, and of those who love him, in bringing them thus together, in an easy compass, and a form attainable to all who love the sports of the field, and yet love mercy more.

FRANK FORESTER.

THE CEDARS, NEWARK, N. J.,

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THE
SPORTSMAN'S VADE MECUM.

BY "DINKS."

CONTAINING FULL INSTRUCTIONS IN ALL THAT RELATES TO
THE BREEDING, REARING, BREAKING, KENNELING, AND
CONDITIONING OF DOGS.

TOGETHER WITH NUMEROUS VALUABLE RECIPES
FOR THE TREATMENT OF THE VARIOUS DISEASES
TO WHICH THE CANINE RACE IS SUBJECT.

AS ALSO
A FEW REMARKS ON GUNS, THEIR LOADING AND CARRIAGE,
DESIGNED EXPRESSLY FOR THE USE OF
YOUNG SPORTSMEN.



TO THE READER.

No one work that I am aware of contains the information that is proposed for this little treatise, which does not aspire to any great originality of idea; but the author having experienced in his early days very great difficulty in finding to his hand a concise treatise, was induced to cull, from various authors what he found most beneficial in practice, into manuscript, and this collection he is induced to make public, in the hopes that any one "who runs may read," and, without searching through many and various voluminous authors, may find the cream, leaving the skim milk behind.

Wherever any known quotation is made, credit has been given to the proper persons, but it may be as well to state that most if not all of the Receipts are copies, though from what book is in a great measure unknown to the author, who extracted them in bygone days for his own use.

With this admission, he trusts that his readers will rest satisfied with the little volume which he offers to their indulgent criticism.

"DINKS."

Fort Malden Canada West

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THE
SPORTSMAN'S VADE MECUM

BREEDING OF DOGS IN GENERAL.

BEFORE commencing to treat of the most correct methods to be observed in the breeding, it will be as well to mention the different varieties of sporting dogs, and also the various sub-genera of each species, of which every one who knows anything of the subject need not be informed; but as this work affects to be a Vade Mecum for sportsmen, young far more than old, it is as well to put before the young idea certain established rules, not to be violated with impunity, and without following which no kennel can be great or glorious. A run of luck may perhaps happen, to set at naught all well defined rules, but "breeding will tell" sooner or later; and, therefore, it behoves any person who prides himself on his kennel, to study well the qualities of his dog or bitch, his or her failings and good qualities, and so to cross with another kennel as to blend the two, and form one perfect dog. This is the great art in breeding, requiring great tact and judgment.

POINTERS.

The breed of Pointers, as now generally to be met with, is called "the English," distinguished by the lightness of limb, fineness of coat, and rattishness of tail. Fifteen or twenty years ago this style of dog was seldom seen; but, in place of it, you had a much heavier animal—heavy limbs, heavy head, deep flew-jaws, long falling ears. Which of these breeds was the best 'tis hard to say, but for America I certainly should prefer the old, heavy, English Pointer. Too much, I think, has been sacrificed to lightness, rendering him too fine for long and continued exertion, too susceptible to cold and wet, too tender skinned to bear contact with briars and thorns, in fact, far too highly bred. Not that for a moment I am going to admit that American Pointers are too highly bred; far from it, for there is hardly one that, if his or her pedigree be carefully traced up, will not be found to have some admixture of blood very far from Pointer in its veins. Now this mongrel breeding will not end well, no matter how an odd cross may succeed, and the plan to be adopted is never to breed except from the most perfect and best bitches, always having in view the making of strong, well formed, tractable dogs, bearing in mind that the bitches take after the dog, and the dog pups after the dam, that temper, ill condition, and most bad qualities are just as inherent in some breeds as good qualities are in others. Here, then, to begin with, you have a difficult problem to solve; for, in addition to the defects of your own animal, you have to make yourself acquainted with those of the one you purpose putting to it. Is your dog too timid—copulate

with one of high courage. But don't misunderstand me. In this there is as much difference between a high couraged and a headstrong dog as between a well bred dog and a cur. Is your dog faulty In ranging, may be too high, or may be no ranger at all, mate with the reverse, selecting your pups according to what has been stated above. If possible, always avoid crossing colors. It is a bad plan, but cannot always be avoided, for oftentimes you may see in an animal qualities so good, that it would be wrong to let him go past you. But, then, in the offspring, keep to your color.

From this general statement it will be easy to see, that in breeding dogs there is more science and skill required, more attention to minutiae necessary, than at first sight appears to be the case. Long and deep study alone enables a person to tell whether any or what cross may be judicious, how to recover any fading excellence in his breed, or how best to acquire that of some one else. We will endeavor to give the experience of some fifteen years—devoted to this subject—to our readers, merely resting on our oars, to describe the various breeds of sporting dogs most desirable for him to possess, together with certain data on which to pin his faith in making a selection from a dealer, though as the eye may deceive, it is always as well to call in the ear as consulting physician, and by diligent inquiry endeavor to ascertain particulars.

The characteristics of a well bred Pointer may be summed up as follows: and any great deviation from them makes at once an ill bred, or, at all events, a deformed dog. To commence, then, at the head:—the head should be broad at

top, long and tapering, the poll rising to a point; his nose open and large; his ears tolerably long, slightly erect, and falling between the neck and jaw bone, slightly pointed at the tip; eyes clear and bright; neck and head set on straight; his chest should be broad and deep—the contrary clearly shows want of speed and stamina; legs and arms strong, muscular, and straight; elbows well in; feet small and hard; body not over long, and well ribbed up—if not, he will be weak, and incapable of doing a day's work; loins broad at top, but thin downwards; hind quarters broad; hind legs strong and large; tail long, fine, and tapering; hair short, sleek, and close. Here you have the pure English Pointer, and as that is the best type of the dog, we shall not attempt to describe the Spanish one, which is not by any means equal to the English, and is, moreover, so quarrelsome, that he cannot be kennelled with other dogs. Good dogs are of any colors, but the most favorite ones are liver and white, white and fawn, pure black, and pure liver. The two first, however, are better adapted for this country, being more easily seen in cover.

SETTER.

We next come to the Setter. His head, like the Pointer should be broad at the top between the eyes; the muzzle though, must be longer and more tapering, and not over thick. Towards the eyes he must have a deepish indenture, and on the top of his skull a highish bony ridge. His ears should be long, pendulous, and slightly rounded. The eyes rather dark and full. His nose soft, moist, and large. Some

breeds and breeders affect black noses and palates; but I must say that there are full as many good without the black as with it. I rather incline to the opinion that they are the best notwithstanding. Body like the Pointer, only deeper and broader, if anything; legs long to knee, short thence downwards; feet small, close, and thickly clothed with hair between the toes, ball and toe tufts they are termed; tail long, fine, and tapering, thickly feathered with long, soft, wavy hair; stern and legs down to feet also feathered. His body and feet also should be clothed with long, soft, silky hair, wavy, but no curl in it. This last smells badly of water spaniel. Colors, black and white, red and white, black and tan. These last I consider the finest bred ones. Roan also is good. The Irish setter is red, red and white, white and yellow spotted. The nose, lips, and palate always black. He is also rather more bony and muscular than the English breed, and ten times as headstrong and enduring. He requires constant and severe work, under most rigid discipline, to keep in anything like decent subjection.

SETTER, RUSSIAN.

The Russian Setter is as distinct from either of the above varieties as bulldog from greyhound. It is covered more profusely with long, thick, curly, soft, and silky hair, well on to the top of the head and over the eyes. He is also more bony and muscular, with a much shorter and broader head. What he wants in dash and ranging propensities, he makes up for in unwearied assiduity, extreme carefulness, and extraordinary scenting powers. The cross between this

and either of the other setters is much valued by some breeders.

SPANIEL.

Of Spaniels there are several varieties, but of these the Suffolk Cocker is the only one deserving a notice. All the others are too noisy, too heedless, and too quick on their legs. It is almost impossible to keep any one of them steady, and, therefore, in this country at least, they are totally useless, since you would not see them from the beginning to the end of the day. Yaff! yaff! half a mile off, all the time putting up the birds, and you unable to stop them. The Suffolk Cocker, on the contrary, is extremely docile, can be easily broken, and kept in order. They are extremely valuable, thirty-five guineas being a low price for a brace of pure bred and well broken ones in England. The right sort are scarce, even there. Here, with two exceptions, I fancy they are not.

SPANIEL AND COCKER.

In appearance they are much like a raseed setter. The head and muzzle is much the same length and size; ears rather more rounded, but not so long; body deep, broad, and long; hair long and stiffish; legs and feet remarkably short, amounting almost to a deformity, and extraordinarily strong; tail short and bushy; it is usually curtailed a couple of joints. The purest colors are liver and white, fawn and white, and yellow and white. These dogs are slow and sure, remarkably close hunters, and obedient; just the things

for cock shooting here. Too much cannot be said in their favor. They are easily taught to retrieve.

RETRIEVER.

A Retriever is a cross breed dog. There is no true type of them. Every person has a peculiar fancy regarding them. The great object is to have them tolerably small, compatible with endurance. The best I have seen were of a cross between the Labrador and water spaniel, or the pure Labrador dog.

BEAGLES.

In some parts of the States Beagles are used, and it may be as well to point out the characteristics of them. First, then, a beagle ought not to exceed fourteen inches in height; its head ought to be long and fine; its ears long, fine also, beautifully round, thin, and pendulous, rather far set back; body not too long; chest broad and deep; loins broad at top, but narrow downwards; legs strong, but short; feet small and close; hair short and close; tails curved upwards and tapering, but not too fine. There is also another sort of beagles, wire-haired, flew-jawed, heavy hung, deep-mouthed. They are very true hunters, seldom leaving the trail till dead, or run to ground.

BREEDING.

It is needless to say that at certain indefinite periods of the year a bitch comes into use, as the term is—generally twice a year, and still more generally speaking, during the

time you most require her services, that is, April and September, spring snipe and grouse shooting, in consequence of which you must either sacrifice your pups or your sport. Now I am aware that in the States, for this reason, a bitch is seldom kept. For my part, I do not object to them, for from experience I can so regulate their failings as to prevent their family cares from interfering with their hunting. The knowledge of this enables me to have my pups when I want them, to get the cover of a dog I fancy, when a strange one comes my way also. The best time, then, to put the bitch to the dog is early in January. By this means you have your pups ready to wean by the middle of April. They have all summer to grow in, get strong, and large, and are fit to break in October on snipe first, and then quail, finishing off on snipe the following spring. After this litter, the bitch probably comes into use again in the end of July or in August. Young ones are not so fond of it as old ones, and, consequently, for quail shooting, your bitch is all correct and well behaved, so far as regards the dam. I look upon the breeding of dogs from any except the best and most perfectly formed of their species, as an act of great folly. There are times when it must be done to keep up the breed, or to acquire one; for no one drafts his best bitches unless he is an ass. For my part, I keep five or six constantly, and draft yearly all my dog pups but two or three, say one pointer, setter, and cocker. By this means I have the pick out of a large number of well bred ones for myself, while the drafts pay the expenses of keep and breaking. This is impossible for every one to do, and they must pick up their dogs the

best way they can. It is my intention for the future to draft my setters to New York and my pointers westward. My cockers, I fear, will not go off yet, my imported dog having taken it into his head to die, and, until he is replaced from England—I have no stock for breed. I could only get a chance of four while last there out of many valuable kennels. However, I have promises of drafts from two or three parties, and ere summer cock come in, doubtless a brace or so will dare the perils of the sea for me; I have no hesitation in saying that, unless most amply remunerated, I would as soon sell my nose as the best pup in the litter, if I wanted it, nor would I advise any one else to do it. If done, you have to put up with inferior dogs. No; I breed to put a brace or so of the best young dogs yearly into my kennel, for my own use, and, while doing this, I also have, probat'y, ten good, well formed dogs to pick from, any one of which were one in want, would gladden the heart to get hold of. Sir William Stanley used to breed some fifty pointers yearly. Out of this lot, two brace were culled for his use. The rest were sold. They paid expenses. Many were excellent dogs, but he got the tip-top ones, and so he ought. This is the way a man who cannot afford to give great prices for good dogs must do, if he is much addicted to shooting. It requires two brace of dogs to do a day's shooting as it ought to be done. Each dog at full gallop the whole time, except, of course, when on birds; and to do this he must be shut off work about noon. Few dogs can go from morn till night without extreme fatigue. I never yet saw the dog that I could not hunt off his legs in a fortnight's hunt, taking him

out every second day only, and feeding him on the best and strongest food. However, for general purposes, three brace of dogs are sufficient, and, when not often used, two are plenty ; but no one ought ever to have less than two brace. It may be managed by always going out with a friend, he keeping one brace, you the other ; he shooting to your dogs, you to his. For my part, give me three brace of my own, and let those be the best shaped, strongest, best bred, and best workers there can be. That is my weakness, and to achieve this I yearly sink a sufficient number of dollars to keep a poor man. But all this is digressing most fearfully from the nursery of young pointers and setters.

BITCH IN USE.

By receipt on a subsequent page, you will see how your bitch is to be brought into use. We will suppose her well formed and well bred. If faultless, put her to a dog nearly equal, if you cannot get one equal. Save the dog pups which will take after the dam. It is well understood that by breeding from young bitches you have faster and higher rangers ; and this also reminds me to say that no bitch ought to be bred from till she is full grown, that is to say, till she is two years old. Many people breed at twelve months, but it is wrong. The bitch is not full grown, and, consequently, the puppies are poor, weak, and miserable. If the bitch has faults, find a dog of the same appearance as her, while he excels in those points she is deficient in. The bitches are partakers of his qualities. Are you short of bone, nose, size, form, temper, look for the excess of these

The cross, or, at all events, the next remove from it, will be just as you wish. Any peculiarity may be made inherent in a breed by sedulously cultivating that peculiarity. Avoid above all things breeding in and in brother and sister, mother and son, father and daughter—all bad, but the first far worse than either of the others, since the blood of each is the same. The other two are only half so. To perfect form should be added high ranging qualities, high courage, great docility, keen nose, and great endurance. That is the acme of breeding. A few judicious crosses will enable you to acquire it for your kennel. To the inattention and carelessness of sportsmen to these points are to be attributed the innumerable curs we nowadays see in comparison to well bred dogs. Anything that will find a bird will do. Far otherwise, to my mind. “Nothing is worth doing at all if it is not to be well done,” and I would as soon pot a bevy of quail on the ground, as think of following an ill bred, ill broken, obstinate cur. It may perhaps be as well to state, that when I spoke of “crosses,” I had not the slightest intention of recommending a cross of pointer and setter or bull dog. Far otherwise. Let each breed be distinct, but cultivate a “cross,” be they pointer or spaniel, from another kennel of another breed of the same class of dogs.

With regard to setters, a little separate talk is necessary, for we have three sorts, English, Irish, and Russian. The cross of English and Irish may and does often benefit both races. So also does the Russian, but I would be extremely careful how I put him to one or the other. Extreme cases may and do justify the admixture, but the old blood ought

to be got back as soon as possible. He is of quite a different species to the other, though with the same types or characteristics, yet this cross is rather approaching to mongrel. Having descanted somewhat largely on the preliminary portion, we will pass on to the rearing of the progeny.

BITCHES IN PUP.

Bitches in pup ought to be well fed, and suffered to run at large, and I am rather of opinion that by hunting them occasionally, or rather, by letting them see game while in this state, does not "set the young back any." Every one is aware of the sympathy between the mother and the unborn foetus, and I for one rather do think it of use.

Few bitches can rear more than six pups, many only four, and do them justice. Cull out, therefore, the ill colored, ugly marked bitches first, and if you find too many left, after a few days you must exercise your judgment on the dogs. I don't like, however, this murdering, and prefer, by extra feeding while suckling, and afterwards, to make up for pulling the mother down, which having to nurse six or seven pups does terribly. My idea always is in the matter, that the pup I drown is to be, or rather would be, the best in the litter. It is humbug, I know, but I cannot help it. At that age all else but color and markings is a lottery. Oft have I seen the poor, miserable little one turn out not only the best, but biggest dog. Therefore, I recommend the keeping of as many as possible.

Let the bitch have a warm kennel, with plenty of straw and shavings, or shavings alone. Let her be loose, free to

go or come. Feed her well with boiled oatmeal in preference to corn meal—more of this anon in the feeding department, mixed in good rich broth, just lukewarm, twice a day. About the ninth day the pups begin to see, and at a month old they will lap milk. This they ought to be encouraged to do as soon as possible, as it saves the mother vastly. At six weeks, or at most seven, they are fit to wean.

FEEDING PUPS AND WEANING.—LICE.—TEATS RUBBED.

Feed them entirely on bread and milk, boiled together to pulp. Shut them in a warm place, the spare stall of a stable, boarded up at the end. Examine them to see whether they are lousy, as they almost always are. A decoction of tobacco water (*vide* receipt) kills them off. Rub the bitch's teats with warm vinegar twice a day till they are dried up. If this be not done, there is great danger of their becoming caked, besides causing her to suffer severely. She must have a mild dose of salts, say half an ounce, repeated after the third day. When the weather is fine, the young pups should be turned out of doors to run about. Knock out the head of a barrel, in which put a little straw, so that they may retire to sleep when they feel disposed. Feed them three times a day, and encourage them to run about as much as possible. Nothing produces crooked legs more than confinement, nothing ill grown weeds more than starvation; so that air, liberty, exercise, and plenty of food are all equally essential to the successful rearing of fine, handsome dogs. Above all things, never frighten, nor yet take undue notice of one over the rest. Accustom them to yourself

and strangers. This gives them courage and confidence. Remember, if you ever should have to select a pup in this early stage, to get them all together, fondle them a little; the one that does not skulk will be the highest couraged dog, the rest much in the same proportion, as they display fear or not. This I have invariably noticed is the case, and on this I invariably act when I have to select a pup, provided always he is not mis-formed. We have now brought our pups on till they can take care of themselves, and while they grow and prosper and get over the distemper, we will hark back a little, and say why we object to fall puppies,—simply because they are generally stunted by the cold, unless they are house-reared. They come in better, certainly, for breaking, but it is not so good to have them after September at the latest, unless it be down South, where, I fancy, the order of things would, or rather should, be reversed.

POINTER AND SETTER.

Hitherto I have omitted to compare the respective merits of pointer and setter. This I had intended to have done altogether, but fearful lest fault should be found with me for doing so, I state it as my deliberate opinion, that there is nothing to choose between them “year in and year out.” A setter may stand the cold better and may stand the briers better, but the heat and want of water he cannot stand. A pointer, I admit, cannot quite stand cold so well, but he will face thorns quite as well, if he be the right sort, and pure bred, but he don’t come out quite so well from it as the setter does. The one does it because it don’t hurt

him, the other does it because he is told so to do, and his pluck, his high moral courage won't let him say no. For heat and drought he don't care a rush, comparatively, and will kill a setter dead, were he to attempt to follow him. Westward, in the neighborhood of Detroit, the pros and cons are pretty equal. I hunt both indiscriminately, and see no difference either in their powers of endurance, see exceptions above, or hunting qualifications. For the prairies, however, I should say the pointer was infinitely superior, for there the shooting—of prairie hen—is in the two hottest months of the year, and the ground almost, if not quite, devoid of water. Therefore, the pointer there is the dog, and if well and purely bred, he is as gallant a ranger as the setter. Eastward, in New Jersey and Maryland, I am led to believe that setters may be the best there. Except "summer cock," all the shooting is in spring or late fall. Westward, we commence quail shooting on September the first. There, I believe, not until November the first. Here we have few or no briers or thorned things, save and except an odd blackberry or raspberry bush. There they have these and cat briers also, and that infernal young locust tree almost would skin a pointer. Therefore, for those regions, a setter is more preferable. Still more so the real springer.

BREAKING.

We will now pass on to the breaking of our young dogs. This may be begun when they are four or five months old, to a certain extent. They may be taught to "charge" and obey a trifle, but it must be done so discreetly that it were almost

better left alone. Nevertheless, I generally teach them some little, taking care never to cow them, one by one. This down-charging must be taught them in a room or any convenient place. Put them into the proper position, hind legs under the body, nose on the ground between their fore-paws. Retaining them so with one hand on their head, your feet one on each side their hind quarters, with the other hand pat and encourage them. Do not persist at this early age more than a few minutes at a time, and after it is over, play with and fondle them. At this time also teach them to fetch and carry; to know their names. Recollect that any name ending in o, as "Ponto," "Cato," &c., very common ones by the way, is bad. The only word ending in o ought to be "Toho," often abbreviated into "ho." This objection will be evident to any person who reflects for a moment, and a dog will answer to any other short two syllable word equally as well. These two lessons, and answering to the whistle, are about all that can or should be taught them.

RANGING, HOW TAUGHT.

Nine months, or better, twelve, is soon enough to enter into the serious part of breaking. This is more to be effected by kind determination than by brute force. Avoid the use of the whip. Indeed, it never in my opinion ought to be seen, except in real shooting, instead of which we would use a cord about five or ten yards long. Fasten one end round the dog's neck, the other to a peg firmly staked in the ground; before doing this, however, your young dogs should, along with a high ranging dog, be taken out into a

field where there is *no* game, and suffered to run at large without control until they are well practised in ranging. Too much stress cannot be laid on this point, as on this first step in a great measure depends the future ranging propensities of the dog. Where a youngster sees the old one galloping about as hard as he can, he soon takes the hint and follows. After a few days, the old one may be left behind, when the pups will gallop about equally as well. These lessons should never be too long as to time, else the effect is lost. Another good plan also is to accustom them to follow you on horseback at a good rate. They will learn by this to gallop, not to *trot*, than which nothing is more disgusting in a dog. When you have your pup well "confirmed in ranging," take the cord, as above directed, peg him down. Probably he will attempt to follow you as you leave him, in which case the cord will check him with more or less force, according to the pace he goes at. The more he resists the more he punishes himself. At last he finds that by being still he is best off. Generally he lies down. At all events, he stands still. This is just what you desire. Without your intervention he punishes himself, and learns a lesson of great value, without attributing it to you, and consequently fearing you, to wit:—that he is not to have his own way always. After repeating this lesson a few times, you may take him to the peg, and "down" or "charge," as you like the term best, close to the peg in the proper position. Move away, but if he stirs one single inch. check him by the cord and drag him back, crying "down" or "charge." For the future I shall use the word "down."

You can in practice which you please. Leave him again, checking him when he moves, or letting him do it for himself when he gets to the end of it, always bringing him, however, back to the peg, jerking the cord with more or less severity. Do this for eight or ten times, and he will not stir. You must now walk quite out of sight, round him, run at him, in fact, do anything you can to make him move, when, if he moves, he must be checked as before, until he is perfectly steady. It is essential in this system of breaking that this first lesson should be so effectually taught that nothing shall induce the dog to move, and one quarter of an hour will generally effect this. In all probability, the dog will be much cowed by this treatment. Go up to him, pat him, lift him up, caress him, and take him home for that day. Half an hour per day for each dog will soon get over a long list of them. There is no more severe, I may as well remark here, or more gentle method of breaking than this; more or less vim being put into the check, according to the nature of the beast. I never saw it fail to daunt the most resolute, audacious devil, nor yet to cow the most timid after the first or second attempt, for it is essential in the first instance that **THEY SHOULD OBEY**. The next day, and for many days, you commence as at first. Peg him down, &c., and after he does this properly lift him up and walk him about, holding on to the cord still pegged in the ground. suddenly cry "*Down!*" accompanying the word with a check more or less severe, as requisite, till he does go down. Leave him as before. If he don't move, go up to him, pat him—a young dog ought never to move while breaking until

he is touched—lift him up, if necessary, lead him about, again cry “down,” and check him until he falls instantly at the word. This will do for lesson No. 2. The next day commence at the beginning, following up with lesson 2, making him steady at each. Before proceeding to the next step, release the one end of the cord from the peg, take it in your hand, cry “down;” if he goes down, well; if not, check him, pat him, loose the end of cord in the hand, let him run about, occasionally crying “down,” sometimes when he is close at hand, at other times further off, visiting any disobedience with a check, until he will drop at the word anywhere immediately. At these times his lesson may last for an hour twice a day. He will get steady more quickly and better.

QUARTERING.

His next step is to learn to quarter his ground thoroughly and properly. It is the most difficult to teach, and requires more care and ability, than any other part of his acquirements, on the part of the preceptor. For this purpose select a moderately sized field, say one hundred or two hundred yards wide, where you are certain there is no game. Cast him off at the word “hold up” to the right or left, up wind. This is essential, to prevent their turning inwards, and so going over the same ground twice. (I forgot to say that a cord fifteen feet is long enough now; it does not impede his ranging, and he is nearly as much at command with it as with one twice as long.) If a dog is inclined to this fault of turning inwards, you must get before him up wind, and

whistle him just before he turns. This will in the end break him of that habit. If he takes too much ground up wind, call "down," and start him off, after you get to him, in the way he should go. You ought also yourself to walk on a line with the direction the dog is going. This will accustom him to take his beat right through to the fence, and not in irregular zigzags, as he otherwise would do. He must now be kept at these lessons in "down," charging, and quartering, till he is quite perfect and confirmed, setting him off indiscriminately to the right or left, so that when you hunt with another, both may not start one way. Much time will be gained, and the dog rendered by far more perfect by continuing this practice for some time. It is far better to render him *au fait* at his work by slight punishments, frequently repeated, and by that means more strongly impressed on his memory, than by a severe cowhiding. This latter process is apt to make him cowed, than which there is nothing worse. Many a fine dog is ruined by it. The punishment of the check is severe, and, as I said before, whilst it never fails to daunt the most resolute, so also it can be so administered as not in the end to cow the most timid.

Here it is you are to use your discretion so to temper justice and mercy that you cause yourself to be obeyed without spoiling your creature. For full a month this ought daily to be done, if fine. It is a good plan to feed your young dogs at this stage all together, with a cord round each of their necks, making them "down" several times between the trough and their kennel. Pat one dog, and let him feed awhile. The rest being "down," call him

back and make him "down" also, checking him if he does not instantly obey. Pat another now, and let him feed awhile, and so on all through one day, sending one first then another. They learn by this a daily lesson of *obedience*, and also to let another dog pass them when at *point*. After your dog is perfectly steady, take him out as before, and when he has run off what is termed the wire edge, introduce him to where there are birds. Set him off up wind, and most probably he will spring the first bird, and chase. Follow him, crying "down." This, in the first ardor of the moment, he is not expected to do, but sooner or later he will. You must now pull him back to where he sprung the birds. By repeatedly doing this, he will chase less and less, always pulling him back to where the bird rises, crying "down." Gradually, by this, he will learn to drop at the rise of the bird, and ultimately to make a point; though most well bred dogs do this the first time. When they do so, cry "down," very slightly checking them if they do not. Great caution is necessary here to prevent their blinking. It is always advisable to teach all young dogs to "down" when they point. When once down, they will lie there as long as you please, and are less likely to blink, run in, chase. You ought, if possible, to get before the dog when you cry "down." It is less likely also to make him blink.

Every dog, old or young, ought to be broken to drop when a bird rises, not at the report of the gun. It renders them far more steady. A young dog ought to be hunted alone till he is perfectly confirmed in these points. It is a very absurd idea to suppose that killing birds prevents their

chasing, quite "au contraire." Seeing the bird fall in its flight encourages them to chase. It is far better to get a bird and peg it down so as to flutter and run about before the dog when he is "down." This persisted in soon brings them steady. The other plan takes a much longer time to accomplish. A young dog may easily be taught to back. Make one dog down, and then cry "down" to him, checking him if he does not, and pulling him to where he ought to drop. In the field, after a time, you use the word "toho," at which also he drops or points. A young dog ought never to be hunted with an old one. The latter always has tricks; in fact, is cunning; and at that age a bad fault is easily learnt, but not so easily forgotten. This is Lloyd's art of breaking. A more sensible one I have never seen, nor do I believe is. I have broken many dogs on it, and never saw it fail. Patience, practice, and temper are all that is required, for dogs can only be taught by lessons frequently repeated. When first you shoot over a young dog, an assistant should hold the end of the long line to check him, should he attempt to run in when the bird falls. Lloyd says further, "I never use a whip on any occasion whatever." He trusts to the cord. This is all right while breaking and finishing off a dog, but after that one cannot be expected to lug fifteen feet of cord in one's pocket, though, doubtless, it is very true that it is more efficacious than the whip, and does not make them so apt to blink. Some will sneak away, and are not easily caught, after committing a fault, and others are so shy, that they would not bear a lash, and yet are readily broken with the cord. By this means also dogs

are broken to fetch a soft substance, for instance, a glove stuffed with wool is put in their mouths, checking them till they hold it, calling them to you, checking them if they drop it. By degrees you get them not only to hold and bring, but also to fetch it. Practice and patience only are required. Any one possessing them, and with but a slight knowledge of sporting matters, by following the above plain and precise rules, may break his own dogs. I have much pleasure in making it known to the American public. Where the article is taken from I cannot say. I got it a few years ago in manuscript, and Lloyd, Sir J. Sebright's keeper, is the author, and very creditable it is to him. The springer is broken by this equally well with the pointer or setter, omitting the pointing part; teaching, however, the quartering and "down," in the open, most perfectly and thoroughly before ever he goes into covert—till steady on birds, dropping the moment a bird rises and a gun is fired—observing, though, to teach him to take his quarters much closer and shorter. The cocker ought never to be fifteen yards from the shooter, and when two are shooting, should take his quarters from one to the other, turning at the whistle, and only gaining a few yards each turn. For beagles, kennel discipline is of more avail than out-door teaching. They must be taught to come and go, when called. To such perfection is this kennel discipline carried in England, that I have seen fifty couples of hounds waiting in a yard to be fed; the door open, each one coming when called by name; leaving his food when ordered "to bed" or "kennel." "Dogs come over," all the dogs coming over

"Bitches come over," when all the bitches come. To do this requires time and patience. Out doors they are taught to follow the huntsman to cover, receiving a hearty cut of the whip if they lag or loiter by the way, whipped up if they neglect to come to the pipe of the horn, if they run to heel, hang too long on the scent, follow false scent, fox, rabbit, or anything else they be not hunted to. With them the whip is used, and severely too, sometimes. And now I have done with the training of dogs, all but the retriever. The cord will apply for him, though in addition to this he must be taught to "seek lost" in any direction you wave your hand. His lessons, however, will extend over a far greater length of time than the others. Age only increases his abilities. The more of a companion you make of him, the more tricks in seeking lost you teach him, the more valuable he becomes. My brother has one that can be sent miles to the house for any article almost, and he brings it. Last winter he sent him for the roast before the fire, and after a tussle with the cook it came sure enough. He is one of the most knowing dogs I ever saw. A large black fellow, of what breed I know not, Newfoundland and setter though, I fancy. Four pounds was his price. He is well worth five times four. For wounded birds he is invaluable, and has only one fault; he does not "charge," which all retrievers, as well as every other sporting dog, should do; else while you are loading, and they rushing about like mad, the birds get up, and you lose a chance, from either not being ready, or your gun being empty. Before concluding, I will state all the words and motions requisite to teach

your pointers and setters. "Down," "Hold up," "Toho." Holding up your hand open means "down," or "Toho," where another dog is pointing. A whistle solus to come in "to heel"—that word for them to get behind you; a whistle and a wave of the hand to the right for them to quarter that way; ditto whistle and wave to the left to quarter to the left. Avoid shouting as much as possible. Nothing is more disgusting than to be bawling all the time. If your dog don't heed your whistle, get him to heel as fast and as quietly as possible, and administer a little strap, whistling to them sharply to impress it on their mind. Never pass by a single fault without either rating or flogging. Always make your dogs point a dead bird before retrieving it; and nothing is more insane than to loo on your dogs, after a wing-tipped bird. Hunt it quietly and deliberately. I know it is difficult to restrain yourself sometimes. How much more difficult, then, to restrain your dogs. Far better to lose a bird, a thing I detest doing, than run the chance of spoiling a young dog. Never take a liberty with him, however you may do so with an old one, though even he can and will be made unsteady, by letting him chase or have his own way. One thing leads to another. I thought I had got through, but methinks it is as well to state the best plan to find a dead bird in cover, or out also, for that matter. Walk as nearly as possible to where you fancy the bird fell; there stand, nor move a step, making the dogs circle round you till they find it. Practise them at this as much as any other part of their education, calling them constantly back if they move off. Should you find a dog going off, notice the direction, but call

him back. If he should still return there, you may presume it is a runner. Let him try to puzzle it out, while you keep the other dog at work close to you. By this plan it is extraordinary what few birds you will lose in a season. Always hunt a brace of dogs. More are too many; one is just one too few. It is too pot-hunterish, too slow. You lose half the beauties of the sport seeing your dogs quartering their fields, crossing one another in the centre, or thereby, without jealousy, backing one another's points—both dropping "to shot" as if shot. You get over twice as much ground in a day. This, in a thinly sprinkled game country, is something. Where very plentiful, you find them all the quicker.

FEEDING.

With regard to the feeding of dogs, some few words are necessary, and we will endeavor to point out the best way to manage them properly, and with a due regard to economy. Where only one or two dogs are kept, it is presumed that the refuse of the house is ample for them. It will keep them in good order and condition; but where more are kept, it will be necessary to look further for their supplies. We will therefore treat them as one would a kennel, distinguishing town from country; for in the one what would be extremely cheap, in the other would be dear. For ordinary feeding, then, in town, purchase beef heads, sheep ditto, offal, i. e. feet, bellies, &c., which clean. Chop them up and boil to rags in a copper, filling up your copper as the water boils away. You may add to this a little salt, cabbage, parsnips, potatoes, carrots, turnips, or any other cheap vegetable. Put this

soup aside, and then boil *old* Indian meal till it is quite stiff. Let it also get cold. Take of the boiled *méa'* as much as you think requisite, adding sufficient of the broth to liquefy it. This is the cheapest town food. In the country during the summer, skimmed milk, sour milk, buttermilk, or whey, may be used in place of the soup. In the winter, it is as well to give soup occasionally for a change. Never use new Indian flour. It scours the dogs dreadfully. Old does not. The plan I adopt is, to buy Indian corn this year for use next, store it, and send it to grind as I require it; and as the millers have no object in boning the old meal, returning new for it, I insure by this means no illness from feeding in my kennel. Although Indian corn has not either so much albumen or saccharine matter in it as oats, it does tolerably well with broth; but when the greatest amount of work is required in a certain given time from a certain quantity of dogs, as in a week's, fortnight's, or month's shooting excursion, I always use oatmeal, for two reasons:—1st, it is far more nourishing in itself, a less bulk of it going further than corn meal:—2nd, you cannot depend on getting old meal in the country, nor yet meat always to make soup. The dogs fed on oatmeal porridge and milk, which you always can get, do a vast deal of work, and have good scenting powers. Using these different articles, I calculate each dog to cost me one shilling York currency per week, and I pay fifty cents per bushel for Indian corn, six dollars per barrel for oatmeal (old), one York shilling for beef head, milk three cents per quart for new, probably, one and a half for skim. In a house there are always bones, potatoe peelings, and pot

liquor. By cleaning the potatoes before peeling, and popping all into the dog pot, a considerable saving is effected in a year, and the dogs are benefited thereby. Mangel Wurtzel and Ruta Bagas, I believe they call them this side the water, are easily grown, and are good food, boiled up with soup.

CONDITION.

This brings me on to what is termed "condition," in other words, that form of body best adapted to undergo long and continued exertion. It is equally certain that a dog too fat, as well as one all skin and bone, is not in this state. These are the two forms from which different people start to bring their animals to the mark. Of the two, I certainly prefer the fat one. During the summer time, dogs should have plenty of air, water, and exercise. This is easily managed by taking them out whenever you go walking or riding, or letting them be loose all day, kennelling at night, and when this is done, by a mild dose of physic a fortnight before the season, and additional exercise along a *hard* road to harden their feet, say two or three hours daily, you have your dogs in fair working order. When you have a dog too fat, you must purge him, and put him through a course of long but slow exercise at first, quickening by degrees, till you work off the fat, and leave substance and muscle in its place. With a lean dog you have a far harder job to manage, and one which takes a long time to accomplish. A mild dose to put him in form first, then the best, strongest, and most nutritious food you can get. Oatmeal and strong broth, gentle and slow exercise, this is the plan to put beef in his

bones without fat. As he grows in substance, increase and quicken his work. Any person living in the country does or ought to take his dogs out when he rides or drives. The pace is fast and severe enough for them, and generally lasts sufficiently long. My dogs are exercised this way every time the horses go out, and are kept in fine order, if anything too fine, perhaps; but, then, what there is, is all muscle and hard flesh. During the shooting season, always feed your dogs with warm meals. Three o'clock is the best time at that season of the year, and a separate mess kept warm for your brace at work, when they return. Nothing conduces more to the keeping your dogs in condition than regular feeding hours and regular work. One meal a day is sufficient. Three o'clock is the best hour, as the dogs have tolerably emptied themselves by the next morning. I omitted to mention in the proper place to accustom your pups to the same food as when kennelled they will get. For this purpose, as soon as they feed well, give them regular kennel food, except that they must have three feeds a day for some six months, and after that two, till they are full grown. Use as little medicine as possible. Always feed your worked dogs immediately they get home. If you wait awhile, and they are tired, they curl themselves up, get stiff, and don't feed properly; and if they so refuse their food, and are by any accident to be out next day, they will not be up to the work. No dogs, however, can stand daily work properly for more than three days, and even that is more than enough for them, but they will stand every second day, if well attended to, for a considerable time. Always see your dogs

fed *yourself*. No servant will do it as it should be done. Ten minutes or a quarter of an hour devoted to this as soon as you return from the field, will be more than repaid when next you use them. If you ride, or rather drive to your ground, as is best to do when more than a mile away, ride your dogs also ; ditto as you return. Every little helps, and this short ride wonderfully saves your animals. I invariably do this. But when I drive, say twenty miles or so, to a shooting station, I generally run one brace or so the whole way, and the other brace perhaps ten miles, taking out next day that brace which only ran the short distance. Always on a trip of this kind take a bag of meal with you also. You are then safe. The neglect of this precaution in one or two instances has obliged me to use boiled beef alone, to the very great detriment of the olfactory senses of my dogs. Their noses, on this kind of food, completely fail them. Greasy substances also are objectionable for the same cause, unless very well incorporated with meal. For this reason I object to "tallow scrap" or chandlers' graves ; but this I sometimes use in summer. Regular work, correct feeding, and regular hours, that is the great secret of one man's dogs standing harder work than others. A little attention to the subject will enable any one to keep his animals pretty near the mark. Amongst the receipts will be found one used in England for feeding greyhounds when in training, if any one likes to go to the expense of it.

KENNEL.

This treatise would not be complete without making some

remarks on that very essential thing, the kennel. Where only a brace of dogs are kept, the common movable box kennel is sufficient. This should be large enough to hold the two comfortably, with a sharp pitch to the roof and projecting front; but I should recommend one for each dog slightly raised from the ground, sufficiently high for the dog to stand up in, and wide enough for him to turn round in. The entrance had better be boarded up, except a hole for him to enter and get out by. But where a large number of dogs are kept, this plan of separate houses is expensive, and in their place I would recommend a brick building sixteen feet long by five feet wide and six feet high, or, if brick be not get-at-able, a boarded house will do; but it ought to be lined and boarded outside, the space between the two filled up with sawdust, and weather-boarded. Besides, this sixteen feet must be divided into three compartments right up to the top, one eight feet for the dogs, one five for the bitches, and one three feet for the worked dogs. The doors should be large enough to admit a man to clean. The beds ought to be raised on a bench from the floor, this bench movable on hinges at the back, so that it can be hoisted up, and cleaning done below. The dogs ought to be prevented getting under their beds, by a board reaching from the outside edge of the bench to the floor. Six or eight inches is sufficient raise. The floor of this kennel should slope outwards, to carry off wet. The door should have a small hole in it, with a swing door, so that by pushing against it, the dogs can get either in or out. In front of these two, that is to say, the dog and bitch departments, a court-yard, either

paved or flagged, both preferable to brick, since they dry quicker, and consequently there is less fear of kennel lameness, caused by paddling on a damp floor. These courts ought to run out at least ten or fifteen feet to the front, and of course the partition kept up between the two. This outside court may be palisaded, but it should be at least ten feet high, else the dogs are liable to break kennel; and the front of the house also at the top should be fortified, to prevent their eloping that way. If possible, a stream of running water should be conducted through the yards; it aids its daily washing, as well as enabling the dogs to get as much pure water as they choose. When this cannot be had, a trough must be daily filled for their use. Clean wheat straw, removed twice a week, or shavings of pine or cedar when to be had are better, must be used for their beds. Always feed your dogs together in a **V** shaped trough, raised slightly from the ground, taking care to restrain the greedy and encourage the shy feeders. In a building of this sort, they will be perfectly warm and comfortable. Every portion of it must be daily cleaned out, and the rubbish carried away. Twice a year it should be whitewashed inside and out, and fumigated with sulphur, tobacco, &c. This considerably helps to destroy vermin. Nothing conduces more to disease than a filthy kennel, nothing vitiates a dog's nose more than foetid smells. In the rear of this kennel should be your boiling house, if your establishment requires one. All that is required is a copper, set in brick, with a chimney, to boil mush and meat in, a barrel to hold soup, and a ledge or tray, three or four inches deep, to pour the

mush in to cool and set; a chopping block, knife, ladle, with long wooden handle, to stir and empty the copper with, a few hooks to hang flesh on, when you use horse-flesh, &c., in place of heads—equally good, by the way, when you can get it—shovel, broom, and buckets. I believe all in this department is now complete and requisite, when you keep six or more dogs. The spare place is good for breeding bitches, when you do not require it for your tired dogs, as also for sick ones. In fact, you cannot well do without it.

And now methinks I may safely add a few words on guns. This, of course, especially to the rising generation. I need not tell you not to put the shot all in one barrel and the powder in the other, though I have frequently seen it done, aye, and done it myself, when in a mooning fit; but I will say, never carry your gun at full cock or with the hammers down, than which last there cannot be anything more dangerous. The slightest pull upon the cock is sufficient to cause it to fall so smartly on the cone or nipple as to explode the cap. Positively, I would not shoot a day, no, nor an hour, with a man that so carried his gun. At half cock there is no danger. By pulling ever so hard at the trigger, you cannot get it off; and if you raise the cock ever so little, it falls back to half cock, or, at the worst, catches at full cock. Never overcharge your gun. Two to two and a half drachms of powder, and one ounce to one and a quarter of shot, is about the load. For summer shooting, still less. Never take out a dirty gun, not even if only once fired out of, even if you have to clean it yourself. After cleaning with soap.

rubbed on the tow in warm, or better, cold water, without the soap, if not over dirty, remove the tow, put on clean, and pump out remaining dirt in clean warm water, rinsing out the third time in other clean warm water. Invert the barrels, muzzle downwards, while you refix your dry tow on the rod. Work them out successively with several changes of tow, till they burn again. Drop a few drops of animal oil—refined by putting shot into the bottle; neat's foot oil is best for this—on to the tow, and rub out the inside of barrels with it well. Wipe the outside with oil rag, cleaning around the nipples with a hard brush and a stick; ditto hammers and the steel furniture. Use boiled oil to rub off the stock, but it must be well rubbed in. Before using next day, rub over every part with a clean dry rag. Nothing is more disgusting than an oily gun, and yet nothing is more requisite than to keep it so when out of use. In receipts you will find a composition to prevent water penetrating to the locks, which ought to be as seldom removed as possible. I shall not tell you how to do this, for if you do know the how, where is the necessity, and if you don't, in all probability you would break a sear or mainspring in the attempt, as I did, when first I essayed, and after that had to get the gamekeeper to put it together. So your best plan in this latter case is to watch the method for a time or two, when you will know as much of the matter as I do.

The finest barrels are rusted the most easily, and suffer the more detriment by rusting. Of course the fouler the gun the greater the evil that arises from its being left foul. In hot weather, barrels suffer infinitely more than in cold;

and in wet, than in dry. When dampness and heat are combined, the mischief is yet augmented; and, probably, the worst conditions that can be supposed are when, to dampness and heat, a salt atmosphere is superadded.

No man who owns a fine gun, which he values, ought ever to put it aside after use without cleaning, even if he have fired but a single shot. Again, every man who loves his gun, should make it a point to clean it with his own hands. It may do in Europe, where one has a game-keeper at his elbow who knows how to clean a gun better than he does himself, and who takes as much pride in having it clean as he. Use strong and clean shooting powders. Don't use too large, nor yet too small shot. Six, seven, and eight are about your mark for ordinary work; for duck, from common gun, number four. Never leave your dog whip at home: you always want it most on those occasions. A gun thirty-one inch barrel, fourteen gauge, and eight pounds weight, is as useful an article as you can have. Never poke at a bird, that is, try to see him along the barrels. If you do, you never can be a good or a quick shot. Fix your eye or eyes on the bird, lift up your gun, and fire the moment it touches your shoulder. Practise this a little, and believe me you will give the pokers the go by in a short time. It is the only way to be a sharp shot. And now I will have done, trusting I have not wasted your time in reading so far to no purpose.

CREDIT GIVEN FOR RECEIPTS.

In the following receipts you will find those of Blaine Youatt, Myres, Herbert, and several other people, but as I

really don't know to whom the credit is due for each individual one, I trust to be forgiven. This much, however, I can say, there are not more than one or two of my own. I have tried most, if not all, and found them good. Some are not quite as in the original, having been amended by a sporting medical man, a friend of mine, to suit the new fashion of preparing medicines.

RECEIPTS.

We will commence these by directions to give a dog physic. If he is not over large, you can manage by yourself. Invert a bucket, and sit on it. Set the dog down on his haunches between your legs, holding him up with your knees. Tie a cloth round his neck; this falling over his fore-paws is pressed against his ribs by your knees. His fore-legs by this dodge are hors du combat. With the finger and thumb of one hand force open his jaws, elevating his head at the same time with the same hand. If a bolus, with the other hand pass it over the root of the tongue, and give it a sharp poke downwards. Close the mouth, still holding up the head, till you see it swallowed. If a draught, give a mouthful, close the mouth, hold up the head, and stop the nostrils. Repeat this, if the draught is too large to be taken at once. If the dog is very large, you must have an assistant, else in his struggles he will upset physic and yourself into the bargain.

GENERAL REMARKS ABOUT DOGS IN PHYSIC.

Keep them dry and warm, especially when you use calomel or any mercurial preparation. Always remove them

BEAGLES.





from the kennel, and put them into an hospital apart from the rest, to prevent infection, as well as to insure the poor brutes quietness. Study the appearance of the eyes, feet, nose, extremities, pulse, &c.

To make a bitch inclined to copulate.—Seven drops Tincture of Cantharides twice a day till effect is produced—about six days, probably.

Mange.—Caused by dirty kennels, neglect, want of nourishing, or improper, food. Cure—1 oz. salts, if dog of moderate size. Rub every third day well into the skin quantum suf. of the following mixture:—

Train oil—tanner's will do—one quart; spirits turpentine one large wineglass full; sulphur sufficient to let it just run off a stick. Mix well. Three applications are generally sufficient. Let it stay on the animal for a fortnight, when wash well with soap and water. Remember, it takes nearly two hours to well scrub the above into the skin. Smearing over the hair is no use. It must get well into the skin; and if neatly and properly done, the dog scarcely shows the application.

Worms.—**R** Cowhage, half a drachm; tin filings, very fine, four drachms. Make into four or six balls, according to size of dog. One daily, and a few hours afterwards a purge of salts or aloes. Powdered glass, as much as will lie on a shilling, i. e. a quarter dollar, new coin, in lard. Repeat once or twice alternate days. Finish off with one to two drachms Socotrine Aloes, rolled up in tissue paper. Mind, the glass must be ground into the finest kind of powder, else it will injure the coats of the stomach.

To make a dog fine in his coat.—A tablespoonful of tar in oatmeal. Make bolus.

Distemper.—Distemper is caused by low keep, neglect, and changes of atmosphere. Symptoms of the disease are as follows :—Loss of spirit, activity, and appetite, drowsiness, dulness of the eyes, lying at length with nose to the ground, coldness of extremities, legs, ears, and lips, heat in head and body, running at the nose and eyes, accompanied by sneezing, emaciation, and weakness, dragging of hinder quarters, flanks drawn in, diarrhoea, sometimes vomiting. There are several receipts for this, the worst and most fatal of all diseases. One is better than another, according to the various stages. This first, if commenced at an early stage, seldom fails. Half an ounce of salts in warm water, when the dog is first taken ill; thirty-six hours afterwards, ten grains compound Powder of Ipecacuanha in warm water. If in two days he is no better, take sixteen grains Antimonial Powder, made into four boluses; one night and morning for two days. If no improvement visible, continue these pills, unless diarrhoea comes on, in which case you must use the ipecacuanha day about with the pills. If the animal is much weakened by this, give him one teaspoonful Huxam's Tincture of Bark three times a day. Keep warm, and feed on rich broth. James's Powder is also almost a certain remedy. Dose four grains; or Antimonial Powder and Calomel, three parts of first to one of latter, from eight to fifteen grains; or, after the salts, Ant. Powder, two, three, or four grains, Nitrate Potash, five, ten, or fifteen grains; Ipecacuanha, two, three, or four. Make into ball, and give twice or three times a

day, according to appearances. Repeat the purge or emetics every fourth day, but avoid too great looseness of bowels. Diarrhœa sometimes supervenes, in which case give Compound Powder of Chalk, with Opium, ten grains. In case of fits coming on, destroy the animal. The same may be said of paralysis. If this disease is taken in its early stage, and attended to, and the dog kept warm, there is not much danger. Otherwise it is very fatal.

Wounds.—Poultice for a day or two; then apply Friar's Balsam, covering up the place.

For a Green Wound.—Hog's lard, turpentine, bees' wax, equal parts; verdigris, one fourth part. Simmer over a slow fire till they are well mixed.

Purgative Medicines.—Salts, one ounce; Calomel, five grains; or Socotrine Aloes, two drachms for moderate sized dog.

Stripping Feet.—Wash in bran and warm water, with a little vinegar; after apply Tincture of Myrrh. Apply sweet oil before he goes out. If his feet are tender, wash them in brine, to harden them. When actually sore, buttermilk, greasy pot liquor, or water gruel, are best. Brine inflames. The dog should be kept at home till feet are healed. Then apply the brine and vinegar.

Canker in the Ear.—Wash well with soap and warm water; fill up the ear with finely powdered charcoal or powdered borax. Clean out daily with sponge on stick and warm water, and repeat the dusting till it heals. Or, perhaps, the best receipt is,—clean out ear with sponge fastened on a pliable stick. using warm soap and water. When quite

clean, dip the sponge in Sulphate of Copper-water, turning it gently round. Put seton in the neck just under the ear.

Oak Bark, one pound, chopped fine, and well boiled in soft water. When cold, take of the Decoction of Bark four ounces, Sugar of Lead, half a drachm. Put a teaspoonful into the ear night and morning, rubbing the root of ear well, to cause it to get well into the cavities. This is one of the best receipts in this book.

To make Sulphate of Copper Water.—Sulphate of Copper half a drachm, water one ounce. Mix well and keep corked.

External Canker of Ear.—Butter of Antimony, diluted in milk to the thickness of cream, will cure it; or Red Precipitate of Mercury, half an ounce, with two ounces of hog's lard, mixed well.

To make a Seton.—Take a dozen or two strands of a horse's tail; plait them; rub blistering ointment on them. Pass it through two or three inches of the skin with a curved surgical needle. Tie the two ends together. Move daily.

Bleeding.—You may readily bleed a dog in the jugular vein by holding up his head, stopping the circulation at the base of the neck. Part the hair, and with the lancet make an incision, taking care not to stick him too deeply. If the animal rejoices in a heavy coat, it may be necessary to shave away the hair. From one to eight ounces are the quantities; but in this, as in most prescriptions, the old proverb is the safest—"Keep between the banks."

For a Strain.—Use Bertine's Liniment; or one ounce Turpentine, half a pint of old beer, half a pint of brine;

bathe the part and repeat; or Sal Ammonia, one ounce, vinegar one pint.

Bruises or Strains of long standing.—Gall, Opodeldoc, excellent. Shaved Camphor two ounces, Spirits of Wine three quarters of a pint. Shake well, and cork close, placing it near the fire till the camphor dissolves. Then add a bullock's gall. Shake well together. Apply, rubbing it well into the part affected till it lathers.

Dog Poisoned.—Give teacupful of castor oil. After he has vomited well, continue to pour olive oil down his throat and rub his belly.

Staggers and Fits.—This generally happens in warm weather. Throw water on them, if convenient. If not, bleed in neck, if you have lancets. If not, with your knife slit the ears, which you can cause to adhere together again; or run your knife across two or three bars next the teeth. Bitches coming off heat are more subject to this than dogs in good health.

To reduce the time a bitch is in heat.—Give her a little Nitre in water, and a dose of Calomel, four grains or thereabouts, followed by salts or aloes.

Bilious Fever.—Is caused by want of exercise and too high feeding. Calomel, six or eight grains; or, in an obstinate case, Turpeth Mineral or Yellow Mercury, six to twelve grains in a bolus.

To destroy Lice.—Sometimes the receipt below for fleas will prove efficacious, but not always; but a small quantity of Mercurial Ointment, reduced by adding hog's lard to it, say an equal quantity, rubbed along the top of the dog's

back never fails. The greatest care must be taken to keep the animal warm.

Fleas.—Scotch snuff steeped in gin is infallible ; but must be used with great care, and not above a teaspoonful of snuff to a pint of gin,—as the cure, if overdone, is a deadly poison.

Torn Ears.—Laudanum and brandy, equal parts. Mix well. Apply alternately with sweet oil.

Feed for Greyhounds in training.—Wheat flour and oatmeal, old, equal parts. Liquorice, aniseed, and white of eggs. Make into a paste. Make loaves. Bake them. Break up into very rich broth.

Swelled Teats.—Make pomade of Camphorated Spirit, or brandy, and goose grease, two or three times a day.

Inflammation of the Bowels.—Symptoms : Dulness of appearance and eyes ; loss of appetite ; lying on the belly, with outstretched legs ; pulse much quickened ; scratching up of the bed into a heap, and pressing the belly on it ; desire to swallow stones, coal, or any cold substance not voidable ; inclination to hide away. It is very dangerous ; requires active treatment. Bleed most freely, till the dog faints away. Clap a blister on the pit of the stomach. Give Aloes, fifteen grains, and Opium, half a grain. Repeat dose three times a day. Bleed after twelve hours, if pulse rises again, and continue dosing and bleeding till either the dog or inflammation gives in. No half measures do in this disease. After determining that it is inflammation of bowels, set to work to get the upper hand. When that is done, there is no trouble. Otherwise it is fatal. Feed low, and attend carefully to prevent relapse.

Films over the Eyes.—Blue stone or Lunar Caustic. eight

grains, spring water, one ounce. Wash the eyes with it, letting a little pass in. Repeat this daily, and you will soon cure it.

Films caused by Thorn Wounds.—Rest the dog till perfectly headed over, washing with rose water. If much inflammation, bleed, and foment with hot water, with a few drops of laudanum in it—about forty drops of laudanum to one ounce of water; or two grains of opium to one ounce of water—one as good as the other. Then apply four or five times a day the following wash:—Superacetate of Lead, half a drachm, Rose Water, six ounces.

To extract Thorns.—Cobbler's wax bound on to the place, or black pitch plaster or a poultice, are equally good.

To preserve Gun Barrels from rust of salt water.—Black lead, three ounces; hog's lard, eight ounces; camphor, quarter ounce; boiled together over a slow fire; the barrels to be rubbed with this mixture, which after three days must be wiped off clean. This need not be repeated above twice in the winter.

Bite of a Snake.—Olive oil, well rubbed in before a fire, and a copious drench of it also.

To render Boots or Shoes Water-proof.—Beef suet, quarter of a pound; bees' wax, half a pound; rosin, quarter of a pound. Stir well together over a slow fire. Melt the mixture, and rub well into the articles daily with a hard brush before the fire.

To Soften Boots.—Use hog's lard, half a pound; mutton suet, quarter of a pound; and bees' wax, quarter of a pound. Melt well, and rub well in before the fire; or currier's oil is as good, barring the smell.

Water-proofing for Gun Locks.—Make a saturated solution of Naphtha and India rubber. Add to this three times the quantity of Copal Varnish. Apply with a fine, small brush along the edges of the lock and stock.

DISTEMPER.

How best to convey to my readers a clear, and at the same time succinct account of this disease, has much troubled me. This is now the third attempt made to set before my brother sportsmen, who have had little or no experience, in the plainest terms, the symptoms and features of the disease, as well as the best remedies to be applied to its various stages and ever varying types. After considerable doubts on the subject, I fancy that by setting before you a series of cases which have come under my own treatment, the peculiar features of each case, the remedies prescribed, and the termination, whether fatal or otherwise, I shall best serve the interests of my readers. I beg expressly to state, that with one or two exceptions—the cases of the older dogs—of which I write from recollection, after a lapse of several years, and consequently cannot be so positive about, the others have all recently passed through my hands, and the course of treatment, &c., has been especially noted, and here recorded with minute exactness. The range of cases are, I believe, sufficiently numerous to meet any form and stage of the disease, from the most simple to the most complicated and fatal. With the sole exception of chorea or paralysis, a case of which I have never fairly seen through, one or two cases are noted, in which this would

have been the termination, but for the remedies applied. The system pursued has been a combination of a great many various receipts, adapted to each peculiar case ; and through the very severe cases that this year have depopulated my kennel, I have been under great obligations to a very talented medical man, whose advice I ever found of great service, and whose professional knowledge enabled him so to vary the quantities and forms of the medicines as best to overcome some particular form or other. Every keeper or sportsman has, or professes to have, some never-failing nostrum or other. Believe me, this is all stuff. There have been, are, and ever will be, cases incurable ; but I will venture to say, that ninety-nine out of a hundred who know anything of the subject will admit that these remedies contain some one or more of the following medicines, all of which are of value :—Epsom Salts, Calomel, Jalap, Tartar Emetic, as purgatives or vomits ; Antimony, Nitre, James' Powder, Ipecacuanha, as sudorifics, diaphoretics, or febrifuges. From these medicines, the most used, it is evident to see what tendency the course of treatment is designed to have, and when it fails, extra means must be employed till that is effected. Here it is that study, practice, and an intimate knowledge of medicines and their combinations prove of great advantage. At this stage more dogs are lost for want of knowledge what next to do than in any other way ; for they are either getting worse or better, never standing still, and each day's illness tells much against the recovery, from the great emaciation and weakness which commences from the first, and keeps increasing daily. Never was there a

more appropriate quotation than "Opus est consulto, sed ubi consulueris mature facto." It were idle to speculate on the origin of the disease. Suffice for us that we have it, and that we consider it an affection of the mucous membrane, solely, in the earlier stages, but ultimately combining itself with general mucous affections. But it will not be foreign to our purpose to state several influences which are supposed, if not actually to cause, at all events, greatly to increase its virulence. They are these:—*Low Diet, Dirt, Confinement in close, unhealthy, damp kennels, too great a quantity of raw, or even boiled flesh, too little exercise, sudden changes in the atmosphere, and contagion.* It cannot be called endemic, since it exists everywhere. Neither is it exactly an epidemic, though some years it does assume that form, while at other times it does not.

Bleeding we see recommended in the Field Sports. Some practitioners are very fond of the lancet. We confess quite a contrary penchant, and hold that bleeding is seldom or ever justifiable, except in cases of violent inflammations.

In distemper, we would not draw blood, once in a hundred times; for the usual course of the disease is so enervating, that in ordinary circumstances nature is reduced far more than agreeable; and as purgatives must be used under any circumstances, they will in general be sufficient to reduce any fever. We will now mention the ordinary symptoms whence we determine this complaint. Lowness of spirit, drowsiness, dimness of the eyes, staring of the coat, loss of appetite, may be noticed, and frequently disregarded. Here we will remark that a mild dose of Epsom salts, according to age

—vide prescriptions at the end, No. one,—will suffice. In a day or two, however, if neglected, sometimes a running at the nose will be seen; or the ears and feet will be cold, while the head and body will be feverish; the nose will be hard, dry, and cracked. By degrees, if neglected, the nose will discharge a thick purulent matter, the belly become hotter and distended, the dog will lie full stretch, belly to the ground, the hind legs begin to fail. He may also have spasmodic and convulsive twitchings, giddiness, foaming at the mouth, epileptic fits. Now he will ravenously eat anything cold, drink any quantity of water.

FIRST CASE.

Three Setter pups, two to three months old. Appearance, &c.—Slight drowsiness, dimness of eyes, staring of coat, fæces hard. Gave two teaspoonfuls No. one, and repeated next day. Intermitted a day. Repeated dose to make sure. All well.

SECOND CASE.

Three Setter puppies, same age at the same time.—Symptoms same, and also heat in body and head; coldness of extremities; bodies inclined to hardness; fæces dark and irregular. Gave four teaspoonfuls No. one. Next morning, if anything worse, belly still hard and swelling, gave each half a grain of Calomel, half a grain of Tartar Emetic. After an hour, no vomit having been attained, repeated the dose. At night gave each a pill—Antimony, two grains, Nitre, ten grains, Ipecacuanha, three grains.

Third day.—Saw pups about eight A.M. One had had a fit, another had one while we were present, and the third seemed likely to have one. Its eyes looked wild; it was unnaturally brisk, and running about; the nose discharged more freely, but not yet any foul matter. Gave all three Calomel and Tartar Emetic as before, and repeated, it not having produced any effect. Between the doses, the two had each a fit, and several, we may as well mention, through the day, the earlier ones being the most severe. About one hour after the vomit, gave each one tablespoonful Castor oil. Fed them with bread and milk. At night gave pill to each—Antimony, three grains, Nitre, ten grains, Ipecacuanha, two grains. Next morning two pups were better. Gave them No. one, two teaspoonfuls, pill as before, night and morning, for two days. No. one the third day. Sent them to kennel. The third of this lot we found not to have had fits; but his bowels were hard, and his secretions black and improper. Gave him Calomel and Tartar Emetic as before, with No. one, usual dose, and pills as above. Gradually he got weaker and weaker, and at last he died. The error here was undoubtedly in not increasing the calomel, and leaving out emetic, so as to endeavor to alter the secretions. A pill, for instance, in this form, would have better met the case. Calomel, one grain, Antimony, two grains, Nitre, five grains, followed up in three hours by one teaspoonful No. two.

THIRD CASE.

Two Setter pups, same age as the last.—Case very bad. Fits had taken place more than once. Bodies hard, tumid.

head and belly hot, evidently much pain in body; ears and feet icy cold; nose hard and thick, pus in it; fæces not noticed. Gave instantly, vomit as before; Calomel and Tartar Emetic, half a grain. Repeated in one hour, not having operated. Half an hour after this had taken place, gave two teaspoonfuls No. two to each. This purged very quickly. One of the puppies appeared to be in much pain. Gave it a saltspoonful of mustard in a little milk. Fits constantly occurring, with intervals of one or two hours, repeated the mustard, and gave Spirits of Hartshorn, six drops, Camphor water, sixty drops, Sweet Spirits Nitre, twenty drops, Laudanum, six drops. Repeated this dose in six hours' time. Kept them all night by the kitchen stove. Slightly better next morning. Gave pill—Antimony, three grains, Calomel, one grain, Nitre, ten grains. Three hours after, two teaspoonfuls No. two. Fits had ceased before night. Gave pill—Antimony, two grains, Ipecacuanha, three grains, Nitre, ten grains, each night and next morning. Next day improvement visible. Wildness of the eye abated; fever in body and coldness of extremities much diminished: secretions, however, still irregular; nose dry and hard. At night gave pill—Ipecacuanha, three grains, Nitre, ten grains, Ginger Essence, five drops. Next morning gave two teaspoonfuls No. two. At night, half teaspoonful diluted Quinine Mixture. Next day gave Quinine twice. Day after, two teaspoonfuls No. one. Sent well to kennel. These were the worst cases of epileptic fits we ever saw. The pair could not have had less than twenty fits each, which lasted from a

quarter to half an hour, during which they uttered most piercing howlings.

FOURTH CASE.

Pointer puppy ten months old.—Brought in from kennel: food chiefly raw flesh. Condition high. Appearance—Eyes very dull; drowsy; nose hard, dry, with thick mucous effusion; evacuations very offensive. Should consider this the putrid type. Gave half an ounce of salts in warm water. Two days after, gave ten grains Compound Powder of Ipecacuanha. No better: nose running a thick, heavy matter; fæces very offensive. Two days after giving last medicine, gave four grains Antimonial Powder, night and morning, for two days. Dog died.

Remarks.—This case happened years ago, when we were young. Our treatment was bad from the commencement, but the case was a vile one also. The following formulæ would have been more befitting:—Calomel, half a grain, Tartar Emetic, half a grain, repeated with intermissions of an hour, till a vomit was secured. Wineglassful of No. two in an hour afterwards. At night, Antimony, four grains, Nitre, ten grains, repeated next morning. If secretions then offensive, Calomel, two grains, followed by wineglass No. two, in three hours. Then use Antimony, Nitre, and Ipecacuanha, more or less, according as you wish to act on the skin, or on the lungs or kidneys. If the cough is bad, increase the Ipecacuanha. If fever prevails, add to the Antimony. Nitre acts on the bladder.

FIFTH CASE.

A Terrier bitch in very low condition, pups having been lately weaned. Age, two or three years.—Symptoms very mild. Gave half an ounce of salts, and two days after, ten grains Ipecacuanha, followed up by four grains Antimonial Powder, for two days. Results: bitch was cured of distemper, but so dreadfully weak, could not feed itself. Gave one teaspoonful of Huxam's Tincture of Bark, three times a day. Hand-fed her frequently with rich beef soup, milk, and bread. After a very hard fight, brought her round.

Remarks.—Could not have done better much, except would have given a combination of Antimony, Ipecacuanha, and Nitre at first, i. e. after purging with salts. Got great credit at the time for the cure, more deserved for nursing well.

From these cases you will be able to see, that for a simple purgative we prefer salts, as being a very cooling dose, and suiting a dog's constitution well. In the earlier stages, it sometimes effects a cure. Where there is a discharge of the nose, you must, after purging, work on the lungs. Where there is fever, you must double your purging, i. e. clean them out front and rear as quickly as possible. Where to this is added a visible disorganization of the secretions, you ought to call in Calomel in large doses, one or two grains, repeated, and this you may continue with Antimony, and so at the same time subdue the inflammation of the lungs. In the earlier part of spring and in fall, there is little fear of diarrhoea supervening. A slight attack of it will not be of

much consequence provided you take care to keep it well in hand. Opium must be used with great caution ; it rather tends to epileptic fits, which, by the way, we consider to result from an almost stoppage of the bowels. Compound Powder of Chalk, Quinine Mixture, Rhubard, Catechu, will generally be sufficient.

In the Field Sports is the following receipt, and as we have invariably found Blaine and Youatt's horse and dog receipts the most reliable, we quote it. It is new to us, and so is a violent case of diarrhoea, for that matter.

R Magnesia, one drachm ; powdered Alum, two scruples ; Powdered Calumba,* one drachm ; P. Gum Arabic, two drachms. Mix with six ounces boiled starch, and give a dessert or table spoonful every four or six hours, *pro re natâ*.

CASE.

We will now suppose a case, for our practice of late years has been confined to young puppies. Ears and feet cold ; body and head very hot ; body hard and distended ; nose hard, dry, and almost stopped up with thick matter ; dry, husky cough ; fæces, hard ; pulse rapid, evidencing much fever. Give instantly, Calomel and Tartar Emetic, half a grain each, repeating it with intermissions of an hour, till you get a vomit. One hour after, give wine glass No. two. Twelve hours after, if fever has not abated, give three grains Calomel, followed in three hours by wine glass of No. two. If the next day you find any fever still lingering, give Calo-

* Catechu, one drachm, will be better than the Calumba. It is far ore efficacious.—*Dinks*.

mel, three grains, as before, Antimonial Powder, eight grains. This will, with, in three hours, the usual quantity of No. two, be pretty sure to be successful. You must now address yourself to the cold and other symptoms; and you may give large doses of Ipecacuanha and Nitre. Keep the bowels open, but avoid active purging, except in cases of fever. If you find at any time the body getting hard and distended, administer the emetic. Let the dog out into the air whenever it is fine and warm, keep his nose well cleaned out, and change his bed daily. Encourage him to drink fresh water, if he will.

The receipts alluded to in the previous pages are as follows :—

No. 1.—For young pups up to six months old.—Of Epsom salts, take two ounces; of water, one quart. Mix well, and keep close corked.

No. 2.—Eight ounces of Saturated Solution of Epsom salts, in water; thirty drops Sulphuric Acid. Mix well, and cork close.

Antimony is preferable, when there is fever. It is an antiphlogistic. Ipecacuanha, when there is much debility. The last also affects the lungs, and is more efficient in removing cold.

Half an ounce of salts is a fair dose for a dog from nine months to any age. No. 2 is particularly recommended, whenever an early action is required. It is essentially short, sharp and decisive.

FORM OF GAME BOOK.

Date.	Deer.	Turkey.	Ruffed Grouse.	Pinnated Grouse.	Quail.	Snipe.	Woodcock.	Duck.	Teal.	Rail.	Plover.	Guns.	Shots.	Place where shooting.	No. of Head to own Gun.	REMARKS.
Total.																

This will be found as convenient a form as any for recording the season's bag, and I would suggest as a means to accurately determine the number of shots, to put a given number, say 50 or 80 caps, into your cap pocket every day on going out, deducting any miss-fired and wasted ones from the balance left on returning. This will give you an exact idea of your average shootings, which will be found not to exceed three out of five shots. In the column of remarks you can state your companion, quantity of game seen, &c.; in fact, any point worthy of notice, and to which afterwards you can refer. The writer's book dates back to 1845, and records every head of game killed while he was out, by his own, as also his friend's gun, remarks on the weather, curious ornithological observations, &c.

DOGS, AND THEIR MANAGEMENT;

BEING A NEW PLAN FOR TREATING THE ANIMAL,
BASED UPON A CONSIDERATION OF

HIS NATURAL TEMPERAMENT.

Illustrated by numerous Engravings,

DEPICTING THE CHARACTER AND POSITION OF THE DOG
WHEN SUFFERING DISEASE.

BY

EDWARD MAYHEW, M.R.C.V.S.

SECOND AMERICAN EDITION.



P R E F A C E .

IN the following pages is laid before the public the result of several years' study. The Author hopes to be able, ultimately, to perfect a system of treatment which shall change only with the progress of the science, of which it can be no more than an offshoot. Saying this, the writer cannot be accused of self-glorification, since there is in the field no living author over whom he might appear to triumph.

The book was also written with the hope of inducing the gentlemen of the Author's profession to study more carefully the Pathology of the Dog. This is at present not properly taught, nor is it rightly understood by the Veterinarians who profess to alleviate canine afflictions. Of all the persons who accept such offices, there is but one who, to the Author's knowledge, devotes the time, attention, or care which disease in every shape demands; and the individual thus honorably distinguished, is MR. GOWING of Camden Town.

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greater force to the jackal. However, to settle the dispute, we here give the likeness of the beast, and leave to the reader to point out the particular breed of dogs to which it belongs.



THE JACKAL.

Beyond the circumstance of the habitats of the animals being distinct, is the well-known fact that all domesticated animals have a disposition to return to their original formation; but who ever heard of a dog, however neglected, or however wild, becoming either a wolf or a jackal?

The dog is spread all over the world, and not only is the animal thus widely distributed over the face of the earth, but there is no creature that is permitted with such perfect safety to the human race to have such continual and intimate intercourse with mankind. It is found in every abode: the palace, the warehouse, the mansion, and the cottage, equally afford it shelter. No condition of life is there with which the dog is not connected. The playmate of the infant, the favorite of the woman, the

servant of the man, and the companion of the aged, it is seen in and around every home.

Thus brought into intimate connexion with the human race, and continually subject to observation, it is not a little strange that the dog should be universally misunderstood. There is no quadruped which is more abused ; whether treated kindly or otherwise, the dog is equally made to suffer ; and probably the consequences of over indulgence are more cruel in their result than is the opposite course of treatment. The health of the beast is perhaps best preserved when neglect deprives it of man's attention ; then it may suffer from want, but it escapes many of the diseases which caprice or ignorance entail upon the generality of the tribe. There exists no creature more liable to disorder, and in which disease is prone to assume a more virulent or a more complicated form. To minister to its afflictions, therefore, demands no inconsiderable skill ; and it becomes the more difficult to alleviate them, since canine pathology is not fully comprehended, nor the action of the various medicines upon the poor beast clearly understood ; yet there are few persons who in their own estimation are not able to vanquish the many diseases to which the dog is liable. About every stable are to be met crowds of uneducated loiterers, possessors of recipes and owners of specifics, eager to advise and confident of success. I seldom send a diseased dog into the park for exercise, that my servant does not return to me with messages which strangers have volunteered how to cure the animal. I hear of

medicines that never fail, and of processes that always afford relief. Persons often of the upper rank honor me with secret communications which in their opinion are of inestimable value ; ladies frequently entreat me to try particular nostrums, and sportsmen not seldom command me to do things which I am obliged to decline. In fact, the man who shall attempt to treat the diseases of the dog, will have no little annoyance to surmount. He will soon discover that science unfortunately can afford him but partial help, while prejudice on every side increases the difficulties with which he will have to contend.

Happily, however, the majority of pretended cures are harmless. A roll of sulphur in the animal's water may be permitted, since it amuses the proprietor while it does not injure his dog. Some of these domestic recipes, nevertheless, are far from harmless, and they are the more to be deprecated, because those which most people would imagine to be safe are the very ones which are attended with the greatest danger. Common salt is a poison to the dog ; tobacco is the source of many a death in the kennel ; castor oil often does the ill which months of care are needed to efface, even if the life be not destroyed. In the majority of cases vomits are far from beneficial ; bleeding is very seldom required, and the warm bath has sealed the doom of innumerable animals.

The foregoing observations will have informed the reader of the reasons that prompt the publication of the present work, which is put forth only as a step towards

the point the author does not yet pretend to have fully attained. The study of years will be required to perfect that which is now commenced, and further experience will probably demand the retraction of many of the opinions herein advanced. The reader will understand, the author in the present work asserts only that which he now believes. It must not be imagined, however positive may read the language in which his sentiments are expressed, that the writer is pledged to uphold any of the conclusions at which he may have arrived; knowledge is in its nature progressive, and canine pathology is not yet clearly made out. The advantages which accompany the study of anatomy, physiology, and therapeutics have yet to be more largely applied to the diseases of the dog, and until this has been accomplished, science, not reposing upon truth, will be constantly subjected to change. The present work, therefore, will be accepted only as a contribution to veterinary literature, and its contents will be viewed as doing nothing more than declaring the temporary convictions of one, who, desirous of truth, does not conceal that his mind is oppressed by many doubts.

In the following pages advantage will be freely taken of the labours of those authors who have written upon the subject; nor must it be supposed, because the writer may feel himself obliged to dissent from, he therefore undervalues the genius of Blaine or Youatt. Before Blaine collected and arranged the knowledge which existed concerning the diseases of the dog, canine patho-

logy, as a separate or distinct branch of veterinary science, hardly existed. The task he accomplished ; but if after the lapse of years some of his opinions are found to be unsound, and some of his statements discovered to require correction, these circumstances may be regarded as the natural consequences of progression, while they in no way deteriorate from the honor due to his name. Youatt enlarged and softened the teaching of his master, and by the liberality of his communications, and the gentleness of his example, improved and adorned the science to which he was attached. To others than these two great men I have no obligations to acknowledge. For their memories I take the opportunity of expressing the highest respect, and confess that to their instruction is fairly due any novelty which the present pages may contain ; since but for those advantages their teaching afforded, it is more than doubtful if I had perceived the facts herein made known.

Before any mention is made of the diseases of the dog, it will be proper to take some notice of the temperament of the animal, as without regarding this the best selected medicines, or the most assiduous attention, may be of no avail. Any one who will observe the animal will soon be made aware of its excessive irritability. The nervous system in this creature is largely developed, and, exerting an influence over all its actions, gives character to the beast. The brain of the dog is seldom in repose, for even when asleep the twitching of the legs and the suppressed sounds which it emits inform us that it is dream-

ing. No animal is more actuated by the power of imagination. Who is there that has not seen the dog mistake objects during the dusk of the evening? Delirium usually precedes its death, and nervous excitability is the common accompaniment of most of its disorders. To diseases of a cerebral or spinal character it is more liable than is any other domesticated animal. Its very bark is symbolical of its temperament, and its mode of attack energetically declares the excitability of its nature. The most fearful of all the diseases to which it is exposed (rabies), is essentially of a nervous character, and there are few of its disorders which do not terminate with symptoms indicative of cranial disturbance. This tendency to cerebral affections will, if properly considered, suggest those casual and appropriate acts which the dog in affliction may require, and which it would be impossible for any author fully to describe. Gentleness should at all times be practised; but to be truly gentle the reader must understand it is imperative to be firm. Hesitation, to an irritable being, is, or soon becomes, positive torture.

He who would attend upon the dog must be able to command his feeling, and, whatever fear he may be conscious of, he must have power to conceal his emotion. The hand slowly and cautiously advanced, to be hastily retracted, is nearly certain to be bitten. Whatever therefore is attempted should be done with at least the appearance of confidence, and the determination of the man will, in the generality of cases, check the disposition

of the beast. There should be no wrestling or fighting. The practitioner should so prepare his acts as to prevent the dog in the first instance from effectually resisting, and the animal mastered at the commencement is usually afterwards submissive. If, however, from any cause, the primary attempt should not be effective, the attendant, rather than provoke a contest which can be productive of no beneficial result, should for a brief period retire, and after a little time he may with better success renew his purpose.

Strange dogs are not easily examined in their own homes, especially if they be favorites and their indulgent owners are present. Like spoiled children, the beasts seem to be aware of all the advantages which the affections of their master give to their humors. They will assume so much, and play such antics, as renders it impossible to arrive at any just conclusion as to the actual state of their health. Dogs in fact are great impostors, and he who has had much to do with them soon learns how cunningly the pampered "toy" of the drawing-room can "sham." For deception, consequently, it is necessary to be prepared, and practice quickly teaches us to distinguish between what is real and that which is assumed. The exertion, however, required to feign disturbs the system, and the struggle which always accompanies the act renders it frequently impossible to make the necessary observation with requisite nicety. Petted dogs are, therefore, best examined away from their homes, and in the absence of any one who has been in the habit

of caressing them. Frequently I have found it of no avail to attempt the examination of these creatures at the residences of their owners ; but the same animals brought to my surgery have, without a struggle, allowed me to take what liberties I pleased. I usually carry such dogs into a room by myself, and commence by quickly but gently lifting them off their legs and throwing them upon their backs. This appears to take the creatures by surprise, and a little assurance soon allays any fear which the action may have excited. The dog seldom after resists, but permits itself to be freely handled. Should, however, any disposition to bite be exhibited, the hand ought immediately to grasp the throat, nor should the hold be relinquished until the creature is fully convinced of the inutility of its malice, and thoroughly assured that no injury is intended towards it. A few kind words, and the absence of anything approaching to severity, will generally accomplish the latter object in a short period, and confidence being gained, the brute seldom violates the contract.

Dogs are intelligent and honorable creatures, and no man will have reason to regret who teaches himself to trust in their better qualities. I have hitherto, in a great measure, escaped their teeth, and being slow and infirm, my good fortune certainly cannot be attributed to my activity. Kindness and consideration work upon animals ; nor do I believe there are many of the lower creatures that will not appreciate such appeals. It is better, therefore, to work upon the sympathetic nature

of the brute, than to compete with it in strength, or endeavor to outvie it in agility. Manual dexterity will often fail, and is seldom employed save when danger is present. Mental supremacy appealing to the source of action ensures safety, by subduing, not the resistance, but the desire to resist.

It is easy to ascertain when the dog has regained that tranquillity which would allow of its being trusted with security. The eye need alone be consulted, and a little observation will speedily instruct any one to read its meaning correctly. When the creature is irritated, the pupil invariably dilates, and by singly marking this circumstance, the temper of the beast may be correctly ascertained. Nor should caution be discarded until the contracted circle assures that the agitation has passed away.

With the smaller kind of spaniels and the generality of petted animals, the indications of the eye may be depended upon ; but with the more robust and less familiarized species it is safest to take some precaution, even while the sign of sagacity is exhibited. Certain dogs, those of coarse breeds and large size, are exceedingly treacherous, and sometimes are not safe even to their masters. Creatures of this kind are, however, usually as devoid of courage as they are deficient of magnanimity ; and by the display of resolution are to be readily subdued.

When, however, really sick, there are few dogs which may not be approached. Under such circumstances, the

utmost gentleness should be employed. The stranger should advance quietly, and not bustle rudely up to the animal. He should speak to it in accents of commiseration, which will be better comprehended than the majority of reasonable beings may be willing to admit.

The hand after a little while should be quietly offered to the dog to smell, and that ceremony being ended, the pulse may be taken, or any other necessary observation made, without dread of danger. Every consideration, however, ought to be given to the condition of the beast. No violence on any account should be indulged; it is better to be ignorant of symptoms than to aggravate the disorder by attempting to ascertain their existence. If the brain should be affected, or the nervous system sympathetically involved, silence is absolutely imperative. No chirping or loud talking ought under such circumstances to be allowed, and the animal should not be carried into the light for the purpose of inspecting it. The real condition of the patient, and the extent or nature of its disease, will be best discovered by silently watching the animal for some time, and attentively noting those actions which rarely fail to point out the true seat of the disorder. Consequently manual interference is the less needed, and in numerous instances I have, when the creature has appeared to be particularly sensitive to being handled, trusted to visible indications, and done so with perfect success. The hand certainly can confirm the eye, but the mind, properly directed,

can often read sufficient without the aid of a single sense.

Having made the foregoing remarks, which the intelligence of the reader will readily enlarge, it will next be necessary to describe in what way the dog should be examined. Simple as this operation may appear, it is one which few persons properly comprehend; and as upon it everything depends, it will not be out of place to devote a few lines to its explanation.

The dog, in the first place, should be permitted to run about, released from every restraint, or only so far confined as is necessary to prevent his escape from the limits of observation. No attempt should be made to attract the animal's attention, but the practitioner, seating himself in one corner, ought to be perfectly still and silent. - The way in which the creature moves; whether it roams about, stands motionless, appears restless or indifferent, avoids the light, seems desirous of companionship, or huddles itself into some place as far as possible removed from inspection; whether it crouches down, curls itself round, sits upon its haunches, turns round and round trying to bite its tail, drags itself along the floor, or lies stretched out either upon its side or belly; in what manner the head is carried, and to what part it is directed; if any particular place is licked, bitten, or scratched; if thirst is great, or the dog by scenting about shows an inclination for food; the nature of the breathing, the expression of the countenance, the appearance of the coat, and the general condition of the body, should

all be noted down. When such points have been observed, the animal is addressed by name, and attempts may be made to approach and to caress it; the way in which it responds, submits to, or resents such advances being carefully remarked.

The dog may then be handled. The eyes and their membrane are inspected, to see if the one be dull or moistened by any discharge, and if the other be reddened, pallid, yellow, or discolored.

The ears are next felt around, their edges lifted to discover if any blackened wax or soreness be present in their convolutions, and slightly squeezed to ascertain if any crackling sensation is communicated to the fingers, or sign of pain evinced by the animal.

The nose is now to be remarked. If it be moist or dry; and if dry, whether it is at all encrusted. The back of the hand or side of the cheek should be applied to the part to ascertain its temperature.

The lips should next be raised, and the state of their lining membrane, with the condition of the teeth, observed.

The jaws should then be separated, that the tongue may be seen sufficiently to note its color, and the breath smelt.

The hand should subsequently be passed over the head and along the back, to feel the hair, and discover whether there exist any sore places or tumors concealed beneath it. The coat may now be generally examined, to find whether in any part the covering is thin or

deficient. Its firmness should afterwards be tried, and the itchiness of the skin tested by the nails, as well as its thickness and pliancy ascertained between the fingers.

The hand should also be applied to the throat, and carried along the course of the windpipe, feeling for any swelling of the salivary glands, or enlargement of the thyroid. It is next passed to the abdomen, and the inferior part of the cavity is gently pressed upwards, to ascertain if the rectus abdominis muscle be contracted, or the animal shows symptoms of tenderness. The abdomen may subsequently be kneaded between the fingers. The amount of fat should not be unnoticed, nor should the firmness of the muscles pass unobserved.

When all this is accomplished, the dog is laid upon its side or back, and the tail being elevated, the anus is inspected and felt, to see whether it be inflamed or protruded, and to feel if it be indurated or thickened.

The feet are now taken up, and the length and shape of the nails, with the condition of the dew claws, inspected, to see whether they are growing into the flesh, or by their shortness indicate the animal has been accustomed to healthful exercise. The pad and web also receive a glance.

If the animal be a male, the prepuce is first pressed and then withdrawn, to perceive if any discharge be present, or if the lining membrane be inflamed or ulcerated.

Should it be a bitch, the vulva are inspected, to

observe if they are moistened by any exudation, or if they are swollen and excited by the touch. They are separated to observe the color of the lining membrane.

The mammæ are then felt, to know if the animal has ever borne pups, or if any of them are hardened. At the same time the parts are squeezed, to discover whether or not they contain milk.

Such is a general description of the manner of proceeding, but there are many possibilities which the above directions, lengthy and minute as they may read, do not include. Such, for instance, as hernia, and disease of the testicle or scrotum. All, however, it would not be necessary to describe at length, and the foregoing instructions will lead the eye to any extraordinary appearances should they exist. The experienced practitioner probably will do less than is here set down, being educated to a promptitude which enables him to leap as it were at once to those parts which deserve his attention. For such the above is not intended; but he who has not made the dog his special study, will certainly find his advantage in going through the whole ceremony; nor will the most experienced practitioner habitually neglect any portion of it, without having cause to lament his inattention. To examine the dog properly, is perhaps even more difficult than to perform the same office upon the horse, and certainly it is a duty which there are few persons qualified to discharge.

Having spoken of the proper manner of examining the animal, before I proceed to describe its diseases, I shall

touch upon some of those matters which are essential to its health. It will, however, be understood that I do not here pretend to treat of hounds, which for the most part are well attended to, and fed, exercised, &c., according to the judgment of the individual entrusted with the superintendence of the kennel. Little probably could be written which would materially amend the condition of these creatures; but petted and housed dogs are commonly treated after a fashion with which judgment has nothing to do. Persons are indulgent to their animals, and imagine that they are also kind, when too often they oppose the dictates of their reason to gratify the weakness of their momentary impulses. A little reflection will convince such people that humanity does not consist in the yielding to every expression of desire. The dog, in a state of nature, being carnivorous, and obliged to hunt for its food, in all probability would not feed every day; certainly it would seldom make more than one meal in twenty-four hours. When the prey was caught, it would be torn to pieces, and with the flesh much earth would be swallowed. The animal, however, is now to be regarded as subjected to man; but while so viewing it, nothing will be lost by keeping in sight its primitive habits.

The dog can fast for a great number of days. Abstinence for forty-eight hours seldom injures it; but it is a practice which ought not to be too frequently adopted, as by its repetition the digestion is weakened. One meal, however, is sufficient, in every case, for the twenty-four

hours. Animals not worked, but kept as favourites, or allowed only to range at pleasure, should not have any meat, nor be permitted to consume any large quantity of fatty substances. Butter, fat, or greese, soon renders the skin of the dog diseased and its body gross. Milk, fine bread, cakes, or sugar, are better far for children, and can be on the human race bestowed with advantage; while given to the brute they are apt to generate disorders, which a long course of medicine will not in every case eradicate. Beer, wine, or spirits, all of which the dog can be induced to drink, show rather the master's ignorance than the creature's liking. Nice food, or that which a human being would so consider, is in fact not fitted to support the dog in health. It may appear offensive to ladies when they behold their favourites gorge rankly, but Nature has wisely ordained that her numerous children should, by their difference of appetite, consume the produce of earth. The dog, therefore, can enjoy and thrive upon that which man thinks of with disgust; but our reason sees in this circumstance no facts worthy of our exclamation. The animal seeking the provender its Creator formed its appetite to relish, is not necessarily filthy or unclean; but could dogs write books, probably the opinions of these beasts upon many of the made dishes and tit-bits of the fashionable circles, would be opposed to the ideas which delicate epicures entertain concerning such luxurious fare. The spaniel which, bloated with sweets, escapes from the drawing-room to amuse itself with a blackened bone picked from a dung-

hill, follows but the inclination of its kind; and while tearing with its teeth the dirt-begrimed morsels, it is, according to its nature, daintily employed. Could we read its thoughts, probably the perverse little pet, even while it is provoking its mistress's horror, is reflecting upon the nasty trash which the human stomach can endure, and upon the tempting relishes which mankind know not, like dogs, how to appreciate. An occasional bone and a little dirt are beneficial to the canine race, while food nicely minced and served on plates is calculated to do harm. Such keep fattens to excess, destroys activity, renders the bowels costive, and causes the teeth to be encrusted with tartar.

A bone is of great service to the animal, which cannot employ a tooth-brush; and the larger it be and the less meat upon it, the better it will prove for little high-fed favorites. A dog in strong health may digest an occasional meal of bones; but the pet has generally a weak and often a diseased stomach, which would be irritated by what would otherwise do it no harm. The animal, nevertheless, true to its instinct, has always an inclination to swallow such substances, provided its teeth can break off a piece of a size fitted for deglutition. Game and chicken-bones, which are readily crushed, should therefore be withheld, for not unfrequently is choking caused by pieces sticking in the *œsophagus*; though more often is vomiting induced by irritation of the stomach, or serious impactment of the posterior intestine ensues upon the feebleness of the digestion.

The bone, therefore, should be large, and on it there should be nothing which the knife can remove. It ought to be thrown upon the earth, and the animal should be allowed to gnaw it at leisure. During the act, a considerable quantity of earth and saliva will be swallowed, and little actual food be added to an already loaded stomach. In all points of view the animal is benefited. The soil is always slightly alkaline, and so is the saliva ; any undue acidity is by both in some measure counteracted ; but the earth is also of further service. Food too highly or purely nutritive will not support life ; but to render it healthy, a certain quantity of indigestible or refuse matter is imperative. The latter portion acts mechanically as a stimulant to the intestines, and hence gentlemen by choice consume bread in which a portion of the husk is mingled, finding it prevents the costiveness that the baker's " best " induces. Dogs are here very like men, but they require more of the mixture than the human being could bear. The animals, therefore, should not be fed off plates.

The better practice is to take the day's allowance and throw it upon the ground, letting the beast eat it with what addition it may please. Neither should the nature of the food itself be disregarded. Oatmeal or ship-biscuit ought always to be given, if alone the better, else rice upon which gravy has been poured. Meat, when allowed, should be lean, and the coarser the better. Paunch or tripe is excellent food for dogs, and for a continuance I have found nothing agree so well. Horse-flesh or any

such filth is never to be allowed ; this kind of food being very apt to generate diseases of the skin. Dogs will thrive on liver, but it is too valuable an article of diet for these creatures to be regularly given. When only occasionally administered it has a well-marked laxative property, and on this account will often be of service in rendering needless the use of medicinal agents. In the raw state, if the animal will take it, its action is more powerful ; but after it has been boiled it generally is sufficiently operative. The meat, whatever it may be, should, for animals not in work, be boiled, raw flesh being more stimulative than their comparatively idle pursuits demand. Such animals, in fact, may be said to lead sedentary lives, and their diet must be lowered to suit their habits. For the pointer, &c., during the season, raw flesh is actually to be preferred, nor should the quantity be limited. The exertion is great, and the utmost indulgence in this respect will seldom do harm ; but my own experience teaches me that the sporting dog is often crippled by being under-fed. It cannot consume too much, neither can that much be too nourishing, especially if the country to be shot over is of a hilly nature. It is one of the prejudices of most men to believe that a feed of oats to the horse, or a meal of flesh to the dog, just before starting, gives strength for the labor which is to be endured. We cannot, however, make strength as beds are made, at any moment, but the invigoration of a living body must be the result of a slow and a long process. On the day of work it is of less consequence what

food is given than is the diet which has been allowed the many previous weeks.

Regularity in the hour of feeding should equally be observed ; and if this matter be generally attended to, there will be no danger of its being forgotten, since dogs' stomachs are excellent time-keepers, and the brutes are not by any delicacy of feeling restrained from asking. The hour, after a little while, will always for the sake of peace be kept, and the animals will soon learn the rules to which they are subjected.

For home-kept dogs there is no possibility of stating the quantity of food that ought to be allowed. No two animals in this respect are alike. One eats much, and its fellow consumes but little ; yet the small feeder in most cases thrives the best even where neither is stinted. The quantity, therefore, cannot be measured. The only rule to be observed is, that there be enough placed before the animal at a stated hour. Let him eat of this till the slackening of the jaws' movement and the raising of the head indicate that hunger has been for the present appeased. So soon as this is remarked the food ought to be withdrawn. On no account should the creature be allowed to gorge to repletion, or eat after its healthy craving has been satisfied. While the dog eats it should therefore be watched ; and this custom works well, as the failure of the appetite often gives to the attendant the earliest indication of disease.

The dog that neglects its day's allowance should not be coaxed to feed, but ought to be left alone for some

minutes, or until its companions have finished their meal. It should then be examined, and if nothing can be detected, perhaps the abstinence of a day may restore it. Until the proper hour arrives on the following day, nothing ought to be given to the animal, nor should any inclination on its part for food be noticed.

Where eating is concerned, dogs have lively sympathies. The animal which at its own kennel has feasted to satiety, will wake from its digestive slumber to taste anything of which it sees its master partaking. These creatures are so peculiarly sensitive in this respect, that they will do violence to their feelings rather than be left out when eating is going forward. Dogs moreover are most pertinacious beggars, and they soon learn the cunning of the trade. On no account should they be permitted to frequent the kitchen. If properly reared, they will be rigidly honest, but, like the "audacious cats," they offer a ready excuse to dishonest kitchen-maids, who will sometimes do injury by subjecting the animal to undeserved chastisement.

Where the servants are trustworthy this danger will not arise; but good servants mostly have tender hearts, and dogs have a peculiar tact in appealing to female weaknesses. However strict may be the orders, and however sincere may be the disposition to observe them, bits will fall,—scraps will be thrown down,—dishes will be placed upon the ground, and sometimes affection will venture to offer just "the little piece," which no one could call feeding. It is astonishing how much will in this way be

picked up, for the dog that lies most before the kitchen fire is generally the fattest, laziest, and at feeding time the best behaved of his company. Consequently no dog should be allowed to enter the kitchen, for their arts in working upon mortal frailty can only be met by insisting on their absence. The dog that is well fed and not crammed, should not refuse bread when it is offered. If this be rejected, while sugar is eagerly snapped up, it will be pretty certain that the animal is either too much indulged, or that its health requires attention.

Some writers recommend pot-liquor for dogs. It is not advisable to use this. The water in which salt meat has been boiled ought never to be employed. Greens are not nutritious, but they often purge; and if the animal will eat them, they can sometimes be given when liver cannot be obtained. Potatoes will, with other substances, agree with animals not required for work, but the rice I have recommended will be found for general purposes the best, and not the most expensive food upon which the animal can be sustained. Persons having lap-dogs will moreover find the keep upon rice, properly seasoned, or soaked in gravy, less liable to render these creatures strong or tainted than the provender which is choicely selected from the joint provided for the family dinner. The warm meat too often presented to these creatures is apt to enfeeble their digestions; for their stomachs are soon deranged, and they never should be allowed to taste any kind of food which is not perfectly cold.

The food for diseased dogs should be prepared with

extreme care, and no disregard of cleanliness; in fact. it should in every respect be such as a human being could partake of, provided the ingredients were not repugnant to his taste. Sickness cannot be relieved without trouble, and in many cases an animal requires as much attention as a child. To gain success, neither time, labor, nor expense must be begrudged; but the attendant must be assiduous and the cook skilful. Nothing smoked or burnt, no refuse or tainted flesh, must on any account be made use of. The meat may be coarse, but it should be fresh and wholesome. Dirty saucepans or dishes ought not to be employed; and so very important are these circumstances, that the practitioner who engages in dog practice will often surprise his acquaintances by being seen at market, or busied over the fire. Beef tea is one of the articles which in extreme cases is of great service. Few servants, however, make it properly, and when a dog is concerned there are fewer still who will credit that any pains should be bestowed upon the decoction. I generally either prepare it myself or superintend the person who undertakes that office, and not unfrequently give serious offence by my officiousness; or, spite of studious attention, fail in procuring that which I desire. Still, as in the last extremity food is even of more importance than medicine, my anxiety cannot be conquered by such schooling, and I am therefore content to bear the sneers of those who cannot understand my motives.

To make beef-tea properly, take a pound and a half of coarse, lean beef: that cut from the neck or round is best.

The leg does not answer so well, however excellent it may be for soup. The rump steak is good for the purpose, but no better than other and cheaper parts; though I often use it when nothing else can be obtained so well suited for this beverage. Let the flesh be carefully separated from every portion of skin or fat, and chopped as fine as for sausage meat—the smaller the better—it cannot be too minutely minced. Without washing it, put the flesh into a clean saucepan. with a pint of water, and so place it upon the fire that it will be half an hour at least before it boils. When it boils, allow it to remain in that state for ten minutes, and then remove it, pouring off the liquor, which should be set aside to cool. When cold, any fat upon the surface should be removed, and, no salt or seasoning of any kind being added, the beef-tea is fit for use.

To the meat, which has been drained of moisture, the skin and fat may now be added and a pint and a half of water, which should be allowed to boil till it is reduced to a pint. This being set aside and afterwards cleared of fat, will be of some service if used instead of water when the next potion is required; and there is no limitation in the quantity which may be needed.

Besides beef-tea, wheaten flour, oatmeal, arrow-root, starch, biscuit powdered, and *ground rice* are also to be employed. These are to be mixed with water, or more often with beef-tea, and boiled; but for sick animals the compound should not be made too thick. The ordinary consistence of gruel will be about the proper substance,

and a little only should be administered every hour or half-hour, as the case may require. From half a pint to a quart, divided so as to allow of a portion being given at the stated periods, will be sufficient for a large or small animal, the quantity being proportioned to the size. When the creature is so far exhausted that it is no longer willing or able to lap, the nourishment should be administered by means of a tube passed down the throat or into the œsophagus ; for if given with a spoon, as the breathing is always disturbed, the consequence may be fatal, from the fluid being drawn into the lungs. The food should always be made fresh every morning ; and none left from the previous day ought on any account to be mixed with it, more especially if the weather be at all warm.

These directions may to some appear needlessly particular ; but so rapid are the terminations of canine diseases, and so acute are they in their development, that while the tax upon the patience is not likely to be of long duration, the care demanded during their existence must be unremitting.

Exercise is next to food, and if of one dogs generally have too much, of the other few have enough. In towns, if dogs are kept, a chain and collar should always be at hand. The servants should be ordered to take the creatures out whenever they go upon their errands, and an occasional free journey with the master will be a treat which will be the more enjoyed because of the habit thus enforced.

Washing dogs is not a custom deserving of half the consideration which is bestowed upon it. The operation is not so necessary as it is generally imagined. Soap and water make the hair look white ; but the coat usually becomes soiled the quicker because of their employment.

The use of alkalies, soda, or potash, in the water, renders the immediate effects more conspicuous ; but unfortunately these substances also make the after-consequences more vexatious. They take the sebaceous or unctuous secretion from the coat. The skin is deprived of its natural protector in this animal ; the cuticle grows weak and dry. The hair is rendered rough ; is prepared to catch the dirt ; and not unfrequently the skin itself, by nature striving to counteract the effect of its deprivation, pours forth a secretion that aids in causing it to appear foul. Above all, the warmth, so repeatedly and often inhumanly applied to the entire surface of the body, debilitates the system of the creature, and generates in the long run certain disease, even if by the drying immediate disorder be not engendered. The warm-bath to the dog is peculiarly debilitating, and the heat which the hand of a cook would endure with a sense of comfort, will sometimes cause the dog to faint. Panting is a sign of sensible weakness in this animal, and few of these creatures are washed without exhibiting it. If washing is insisted upon, the water should never be warm, and in cold weather only should the *chill* be taken off. The soap ought to be of the mildest quality ; but the yolk of an egg is much to be preferred, and in its effects is every

way more beneficial where the hair, either of man or beast must be cleansed. A small dog will require the yelk of one egg ; and a Newfoundland the yelks of a dozen eggs. The yelks are to be separated from the whites and smeared well into the hair. A little water is then to be poured upon the back, and the hand is to be rubbed upon the coat till a lather covers the body, after which the hair may be cleared by copious ablutions. This process is much to be preferred, and the dog dislikes it far less than when soaps are employed. His eyes are not made to smart, or his skin to burn, and if he tastes the substance he does not therefore sicken. Moreover, when the business is ended, even if some portion of the egg should cling to his hair he will not on that account neglect his personal appearance. The coat will be found to look bright, and to remain clean for a longer period than after the adoption of the customary thoughtless process.

Washing, however, is not constantly required, if a dog be kept combed and brushed every morning, and does not reside in a very filthy locality. A little dirt after a walk is easily removed, if it be allowed to dry perfectly, and the hair is then rubbed and picked by the hand of its attendant, when the comb will complete the proceeding. A bath every morning does the generality of dogs good ; but it should be cold, and the animal ought not to be punished by having its head submerged. It should be plunged up to the neck, the head being held above the surface. While in the water the coat should be well

rubbed with the hand, that every portion of the hair may become thoroughly soaked. This over, no attempt should be made to dry the dog, for that is not by any industry to be perfectly accomplished. Neither ought the dog to be wrapped up, placed before the fire, or suffered to lie about, which it is always by a sense of discomfort induced to do, if not made to move. The animal ought immediately to be started for a scamper, and never allowed to remain quiescent until its activity has driven every trace of moisture from its body. Not until this is thoroughly effected should the creature be brought indoors, or be suffered to rest for a moment. If healthy it will require little exertion on its attendant's part to make it jump and run about; but some of these little animals have to carry a burthen of fat which no sense of uneasiness can provoke them to move under of their free wills. An active lad with a chain may, in these last cases, be of much use; but he should be told to exercise his charge in some spot open to the master's eye, else the boy may play while the animal shivers.

Some dogs show a great dislike to, strenuously fighting with, the collar and chain; others will exhibit the most piteous distress, by squatting upon their hocks, and whining, while they pant vehemently, and look imploringly up to the face of their leader. The first are probably not aware of the intention of the bonds to which they are subjected, and should not be harshly rebuked. The voice ought to assure them, and means be resorted to calculated to allay their fears. Gentleness and firmness

will in two or three days render such animals perfectly submissive for ever after. The last kind are rank impostors. No one not familiar with these animals would credit the arts which they can with such excellent effect and apparent genuineness practise to gain their ends. They have been used to be carried, and they prefer riding in the arms of a human being. Their insinuating tricks ought to be rewarded only by laughter, accompanied with an admonition.

Dogs are very intelligent. They understand much more than men choose to give them credit for. Their pride is enormous, and through this feeling they are easily moved. Laughter, when directed against himself, no dog can endure, and the slightest reprimand is always answered by an immediate change of aspect. Rather than have their dignity offended, dogs will quickly become honest, especially when deceit is experienced to be of no avail. People who are physiognomists may detect this sentiment impressed upon the countenance. Upon the next page is a portrait of a Mastiff. Mark the absolute Asiatic dignity, only outwardly slurred over by a heedlessness of behaviour. Does it not seem as though the creature, through very pride reposing upon strength, was above forms? Who could think of laughing at such gravity? Would it not be like ridiculing nature to insult one who has such outward claims to our respect?

Sporting dogs will always take the exercise that is beneficial, and for such the cold bath is much to be recommended. Only in skin diseases should the tepid bath be

resorted to. It is of much service when the skin is hot and inflamed, but after it, exercise ought not to be neglected. For healthy animals the hot or warm bath should



THE MASTIFF.

never be employed; but the sea is frequently as beneficial to dogs as to their owners; only always bearing in mind that the head should be preserved dry.

Vermin often are very troublesome to dogs, and I have known these animals destroyed because their owners were ignorant of the process by which the annoyance might have been readily conquered. There are many powerful drugs recommended by different writers to effect this end; but though all of them are sufficiently potent to annihilate the parasite, most of them are also strong enough to kill the dog. When fleas are numerous, the dog must be taken from the place where it has

been accustomed to sleep. The bed must be entirely removed, and the kennel sluiced—not merely washed—with boiling water, after which it ought to be painted over with spirits of turpentine. The dog itself ought to be washed with eggs and water, as before directed; but with the yelk of every egg a teaspoonful of spirits of turpentine should be blended. After this, the animal should have pine shavings to sleep upon, and if these are frequently renewed, the annoyance will seldom be again complained of. As, however, exceptional cases will always start up, should the tribe not be entirely dispersed, the washing must be repeated; or if from want of time or other cause it be inconvenient to renew that operation, a little powdered camphor rubbed into the coat will mostly abate and often eradicate the nuisance.

Lice often cover the body of the dog, and especially crowd upon its head around the eyes and lips. There need be no dread of their presence, since these vermin will not live upon the human being, though similar to the kind which will. When they are perceived, the dog should be carried into some place in which grease stains are not of much consequence. It ought then to be covered with castor oil till the hair is completely saturated. In this state it should be allowed to remain at least twelve hours, at the expiration of which time the oil may be removed with yelk of eggs and water: only an additional number of eggs will be required. As to the quantity of castor oil which may be necessary, a moderate-sized dog with a long coat will require about a

pound, and a large Newfoundland four times that amount. The process, as might be anticipated, operates upon the bowels ; but I have never found it to do so with any dangerous power ; on the contrary, the laxative effect is generally in these cases beneficial.

Medicine to the dog requires to be administered with caution. The nostrums which are so particularly recommended by grooms and farriers ought never to be made use of. The veterinary surgeon is less likely to commit error ; but there are, however, few of the profession who devote attention to the dog with the zeal which the comprehension of its diseases and their treatment demand. Huntsmen and gamekeepers are generally from practical experience not altogether inapt dog doctors, where the larger and more robust kind of animal is to be treated , but for the smaller and petted species these persons ought not to be consulted. Many of their receipts are harsh—not a few of them inoperative—and some even dangerous ; while all for the most part are pushed down at random, or in total ignorance of any effect the agents employed may induce beyond the intended one of doing good or working a certain cure. Nevertheless, with the kind of animals generally entrusted to their charge, such persons are so far successful that, in the absence of better advice, they deserve to be consulted for the larger species of dogs. The human physician will also, on occasions, be enabled to prescribe advantageously for the canine race ; but not knowing the treatment of the diseases, and the symptoms being too often deceptive, the high-

est opinions are by no means to be absolutely relied upon.

Dog-doctoring is, in fact, a separate branch of science so intricate as to call for intense study strengthened by constant observation. No one not attached to the animal should attempt to master it, for success in such a case would be hopeless. The annoyances are so great that the patience is continually being tried; and the facts on which reliance can be placed are so few, that he who is content to depend upon the received assertions will never be able to realize his expectation. Nothing is more erroneous than to believe that there is any close analogy between man and the dog in the operation of medicinal substances. Aloes, rhubarb, &c., are not purgatives to the dog; but castor oil, which to the human being is a gentle laxative, to the dog is an active purge; while Epsom salts are a violent hydragogue to the canine patient, producing copious and watery stools. Common salt is in large doses a poison, and in apparent small quantities is so strong an emetic as to be dangerous. Salivation speedily ensues upon the use of minute quantities of mercury, which therefore cannot be considered safe in the hands of the general practitioner. *Secale cornutum* has little specific action beyond that of inducing vomiting; and strychnia cannot be with security administered, on account of its poisonous operation upon the animal. Other instances, casting more than suspicion upon the inferences which every writer upon *Materia Medica* draws from the action of drugs given to dogs,

could easily be quoted, but they would here be somewhat out of place ; and probably sufficient has been said to check a dangerous reliance upon results that admit of no positive deduction

It is painful to peruse the "*experiments*" made especially by the French authors. We read that so much of some particular agent caused death to a dog in such a period ; but he must be wise indeed who learns anything from statements of this kind. The word dog represents animals of various sizes and very diverse constitutions ; therefore no conclusion can be drawn from an assertion that does not embrace every particular. Unfortunately, however, the operators think it no disgrace to their scientific attainments to put forth such loose and idle assertions ; nor do they seem to hold it derogatory to their intelligence that they assume to reach a show of certainty by experimentalising upon a creature about which, as their reports bear witness, they literally know nothing. Equally unsatisfactory are the surgical and physiological experiments made upon these creatures. No results deduced from such acts can be of the slightest importance. The anatomy of the dog is not by them generally understood. There is no book upon this subject that is deserving of commendation ; and, to instance the ignorance which prevails even in places where a superficial knowledge ought to exist, I will mention but one circumstance.

At the Royal Veterinary College there is a professor of Particular Anatomy, whose duty it is specially to in-

struct the pupils concerning the dog. The lectures, however, embrace but little, and that little is principally devoted to wandering remarks upon the osseous structure. Of the value of such teaching some opinion may be formed when the skeleton at the College actually exhibits the bones placed in wrong or unnatural situations. After the proof thereby afforded, with what reliance can any sane mind accept the awful declarations of those anatomists who, upon the living bodies of these creatures, have, according to their own accounts, exhibited a nicety and certainty of skill which the profoundest acquaintance with the various structures and parts would still leave incomprehensible? Such reports evidence only the presumptuous folly of individuals—the publication of such records testifies no more than the ignorance of the age.

To give medicine to the Dog often creates more bustle than the magnitude of the creature appears to justify. Moreover, if the parties concerned in the undertaking are not quite up to their business, the animal, which, between its gasping, howling, and struggling, will find time to bite, increases the activity by provoking human exclamations. I have known this species of confusion to have been continued for half an hour; during which work was stopped in a forge, and three brawny smiths joined a veterinary surgeon's efforts to give a pill to a little spaniel that could not have weighed above eight pounds. The dog was beaten and hands were bitten, but after all no pill was swallowed. The result was the natural consequence of the manner of proceeding. No

man should contend with an animal, and especially with a dog, whose excitement soon renders it incapable of obedience.

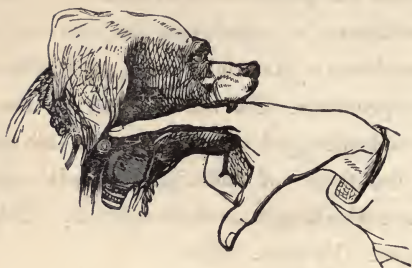
With brutes of every kind, if the mastery cannot, by a bold stratagem, be gained at once, it should be only established through the confidence of the animal, which a few acts of kindness will, in the majority of cases, easily win. I have had dogs brought to me which seemed disposed rather to part with life than permit their jaws to be handled. The poor beasts had been harshly used by the persons who had previously undertaken to treat them. These creatures have remained with me, and in a little time have grown so submissive that my shop-boy could with ease give any kind of physic which I ordered to be prepared. Firmness and kindness were the only stratagems I employed. I took care never to give the dog a chance of mastery, but while ensuring my victory, I was careful that the conquest caused no sense of pain. A few pats, with a kind word, and an occasional reward in the shape of a bit of meat, induced the creature more willingly to submit when the next dose came round.

A small dog should be taken into the lap, the person who is to give the physic being seated. If the animal has learned to fight with its claws, an assistant must kneel at the side of the chair and tightly hold them when the dog has been cast upon its back. The left hand is then made to grasp the skull, the thumb and fore finger being pressed against the cheeks so as to force

them between the posterior molar teeth. A firm hold of the head will thus be gained, and the jaws are prevented from being closed by the pain which every effort to shut the mouth produces. No time should be lost, but the pill ought to be dropped as far as possible into the mouth, and with the finger of the right hand it ought to be pushed the entire length down the throat. This will not inconvenience the dog. The epiglottis is of such a size that the finger does not excite a desire to vomit; and the pharynx and œsophagus are so lax that the passage presents no obstruction.



When the finger is withdrawn, the jaws ought to be clapped together, and the attention of the creature diverted. The tongue being protruded to lick the nose and lips will certify that the substance has been swallowed, and after a caress or two the dog may be released. Large brutes, however, are not thus easily mastered. Creatures of this description must be cheated, and they fortunately are not so naturally suspicious as those of the smaller kind. For months I have thus deceived a huge, ferocious, but noble guardian of a yard, who appeared incapable of conceiving that deception was being practised. The dog bolts its food, and, unless the piece be of unusual size, it is rarely masticated. The more tempting the morsel, the more



eagerly is it gorged ; and a bit of juicy or fat meat, cut so as to contain and cover the pill, ensures its being swallowed. Medicine, however, which in this manner is to be administered, ought to be perfectly devoid of smell, or for a certainty the trick will be discovered. Indeed, there are but few drugs possessed of odour which can be long used in dog practice, and even those that are endowed with much taste cannot be continuously employed. When the dog is very ill, the intelligent beast becomes conscious of its danger, and almost any kind or any form of medicine will be accepted. There is no difficulty generally then ; but in chronic diseases, that only vex the temper and scarcely lower the spirit, the ingenuity will mostly need to be exerted. Some medicines, however, can be dissolved in the water ; others may be smeared upon the food ; and fortunately the majority of those drugs appropriate to slow and inveterate disorders admit of being thus exhibited. Fluids are perhaps more readily than solids given to dogs, by the generality of inexperienced persons. To administer liquids, the

jaws should not be forced open and the bottle emptied into the mouth, as when this method is pursued the



greater portion will be lost. The animal's head being gently raised, the corner of the mouth should be drawn aside, so as to pull the cheek from the teeth. A kind of funnel will thus be formed, and into this a quantity of the medicine equal to its capacity should be poured. After a little while the fluid will, by its own gravity, trickle into the pharynx, and oblige the dog, however unwilling it may be, to swallow. A second portion should then be given in the like way, and thus, little by little, till the full dose is consumed. Often dogs treated in this fashion swallow a draught very expeditiously; but others will remain a considerable time before they deglutate. Some, spite of every precaution, will manage to reject the greater part, and others will not waste a drop. The dexterity of the practitioner makes some difference; but no skill can ensure the drink being taken.

Patience, however, is here of most avail; but when the mouth is full of fluid, by gently separating the jaws the animal may be caused to deglutate.

Two pieces of tape, one passed behind the canine teeth or tusks of the upper, and the other in like manner upon the lower jaw, have been recommended. The tapes are given to an assistant, who, pulling at them, forces the mouth open, and holds it in that position. In certain cases this may be adopted for pills; indeed every stragem will be needed to meet the multifarious circumstances that will arise. For ordinary occurrences, however, the practice is not to be commended, and should never be embraced when drinks have to be given: the animal cannot swallow while the jaws are held asunder; but for solids this plan answers better. There are several objections, however, to be urged against its constant use. The operation is violent, and the restraint it necessitates not alone prevents the poor animal deglutating fluids, but also terrifies the brute, who, on the next occasion, naturally is the more resistful. Difficulties, therefore, increase, and the dog generally is not long before it learns to baffle the attempt to confine it. Moreover, unless the assistant be very well up to his business, his steadiness cannot be depended upon, and the hand often is wounded by the teeth of the patient.

I therefore do not, as a general custom, resort to the tapes, and I advise others only to employ them upon necessity. There are some creatures so artful and so resolute that any attempt to give them physic is certain

to be frustrated. These are mostly small dogs that have been tutored by severity, and such animals are not subdued by any amount of suffering. The poor beasts fear the doctor more than the disease; and, though gentle in their dispositions, are resolute in their resistance. For such cases I employ the stomach pump, and by its aid introduce a dose of sulphate of magnesia; for in general it is only purgatives that require to be given in bulk. Other drugs may be either disguised, or exhibited by injection. Enemata are of great service to this animal, and I make much use of them. In their exhibition, care should always be taken to introduce the pipe without any force; having previously greased the tube to ensure its passing the more readily. While the instrument is in the rectum the dog should be firmly held, else, in its struggles, the intestine may be injured. The fluid should be gently thrown up, even when a large quantity is employed. For those injections, however, which it is desirable to have retained, from an ounce to a quarter of a pound will be sufficient. Warm water ought not to be used as an injection, since it washes away the mucus, renders the intestinal surface harsh, and prevents the passage of the fœces. Linseed tea or any mucilaginous fluid answers the purpose better, and a solution of soap is excellent in many cases, when only a laxative effect is desired. The form, however, as will in the course of this work be explained, must be repeatedly varied, since this agent may be rendered medicinal or nutritive.

Purgatives are most valuable, but are not free from

danger. The digestive canal of the dog is peculiarly irritable, and no less sensitive to the action of medicine. There are few diseases in which the stomach and intestines are not involved, and very many in which purgatives are directly contra-indicated. No one should get into the habit of thrusting physic of this nature down the throats of his animals; and sportsmen may rest assured that, to the dog at all events, preparatory doses are not necessary to condition. Those, however, who persist in using such stuffs will do well not to employ the compounds in general use. The mixture of poppies, buckthorn, and castor oil is a filthy mess; and I do not understand the principles upon which the abomination is based. A better and more cleanly mixture is thus made:—

Ol: Ricini	4 parts.
Ol: Olivæ	2 “
Ol: Anisi	Q. s. Mix.

A little pounded sugar added to this will often render it palatable, which, being of a fluid consistency, is without difficulty exhibited. The compound, however, flows the more readily if it be slightly warmed, and in winter it even requires to be thus prepared. Sulphate of magnesia I rarely employ; and, as a general purgative, it is not suited to the dog, though in exceptional cases it will be seen I recommend it. Should pills be preferred, the following will be found to answer every purpose:—

Ext: Col:	Half a scruple.
Pulv: Colch:	Six grains.
Pil: Hydrarg:	Five grains.

This is for one pill, which is a dose for a small dog of seven or eight pounds weight. Three times the quantity would be required for a Newfoundland. It is not very powerful in its action; its effect upon the system being quite as much alterative as laxative. The animal under its operation is evidently nauseated, and refuses food for about twelve hours; at the expiration of which time relief is afforded by a not very copious, but bilious evacuation. It is, however, important that, after the administration of a purgative, the dog should be permitted to remain perfectly quiet; since, if put to exercise, or much excited, the medicine will in all probability be ejected.

Emetics are shamefully abused, being so universally employed by the owners of dogs, and so strenuously recommended by writers upon their treatment, that one might think these agents were held to possess some charmed power over the health of the animal. Lecturers are marvellously fluent upon the subject of the dog's vomiting, which they dwell upon with such delight that their auditors must suppose the act of revulsion in the canine species is a pleasurable performance. Let any one, however, possessed of sense and reason, observe the creature in the act of being sick. The attitude is not characterised by ease; but the body is drawn up preparatory for some unusual effort. The countenance does not bespeak tranquillity; but the face is expressive of inward oppression. The animal's frame is shaken by convulsive spasms, each throe being announced by a deep

pectoral sound, and only after this has repeatedly been heard is the stomach able to cast off its contents.

The description denotes nothing calculated to suggest that the organ whose derangement is so marked should be rudely tampered with. It is true the dog can readily be made to vomit. No creature is more easily moved in that way; but in such a circumstance reason should perceive no license to thrust emetics down the animal's



throat. The organ which is so readily excited, by the fact asserts its sensibility, and on that very account ought to be the more respected. I have found oftener difficulty to check this tendency than reason to provoke it. Repeatedly are tonics rejected, and only by the reduction of the dose can the dog's stomach be made to retain the medicine. The emetics in common use are, moreover, far too violent. Antimonial wine, from half a teaspoonful to a dessertspoonful, is much preferable to tartar emetic and calomel.

On no account should such doses as Blaine prescribes ever be exhibited. Youatt in his recommendation is much better, but even the amount he orders is too great.

A quarter of a grain of tartar emetic in solution is sufficient for a middling sized dog ; and four grains of ipecacuanha is equally effective. If in two hours (which rarely happens) no effect is produced, it is better to repeat the dose, and continue even to do so, than to commence with a larger quantity in the first instance. These animals in their constitutions are so various, and the practitioner has so little to guide his judgment, that the utmost caution will not in every instance protect him from self-reproach ; and in no case is he warranted in closing his mind against the suggestions of prudence. It is true the primary effects of an emetic are generally gratifying, but the after consequences, if carefully traced, will not be found to be equally satisfactory. Often the purge and the vomit, with which every dabbler commences his treatment of a " dog-case," appear to give relief ; but, commonly, when the immediate excitation which their first operation naturally calls forth passes away, debility ensues, and the termination is not in harmony with the beginning. I once was very partial to emetics. I now rarely make use of them, and have no reason to lament my change of practice.

No notice will be bestowed upon those mysterious compounds known as alteratives, sedatives, &c., which are given merely because habit has sanctioned their administration. Names are in medicine dangerous things, and give a currency to error which, to man and beast alike, has proved fatal. Neither will any attempt be made to classify diseases ; which custom, though it has some advantages, is likely to mislead, by setting up a system

where no positive connexion can be demonstrated. The disorders of the dog in this work will be treated of after no formal plan ; but the index must supply that want of arrangement, the absence of pretence to which probably will give offence to regular students.

DISTEMPER.

OF all the diseases to which the dog is subject, this one is the most dreaded. Writers have agreed it is the scourge of the canine race. Blaine and Youatt speak of it as capricious and untractable ; the French regard it as incurable. The owners of dogs, despairing of benefit from regular means, have for a long time been content to trust in charms and specifics. Folly and cruelty have been embraced to accomplish that which kindness and science appear unequal to perform ; and one general feeling seems to be entertained with regard to the distemper—most persons being agreed that the disorder is not to be subdued by medicine, and that its fatality is independent of the best efforts of man to check it.

My experience does not corroborate these various but harmonious accounts and opinions. In my conviction, the disorder is feared only because it is not understood, and is rendered worse by the injudicious attempts to relieve it. I find it tractable, easily mastered, and when submitted to me before the system is exhausted, I am very seldom disappointed by the result of my treatment. It has for some time been my custom to tell those who

bring me an animal affected with this complaint, that if my directions are strictly followed, the creature "*shall*



not die." When saying this, I pretend not to have life or death at my command, and the mildest affections will sometimes terminate fatally ; but I merely mean to imply, that when proper measures are adopted, distemper is less likely to destroy than the majority of those diseases to which the dog is liable.

Distemper has been hitherto regarded as an inflammatory disorder, which was to be conquered only by antiphlogistic remedies. Bleeding, purging, vomiting, sedatives, blisters, and setons were employed ; and the more acute the attack, the more violent were the means resorted to for the purpose of its conquest. Under such treatment I do not wonder at the evil character which the malady has obtained ; for in proportion as the efforts made were great, so would be the probability of the disease proving destructive. There can be no doubt that more dogs have been killed for the distemper than would

have died from it if nature had been suffered to take her course; and yet there is no disease that more requires help, or rewards the practitioner more largely for the assistance he affords.

The reader is entreated to dismiss from his mind all he may have read, or heard, or thought of this affection. Let the many tales about never-failing receipts, and the only proper modes of treatment, be for a time at all events forgotten, that the author, who undertakes to oppose prejudice and to contradict authority, may at least have a patient hearing. There is no reason to doubt that many cases which have been called distemper have, to all appearance, been saved by each of the reputed methods of cure. A pillet of tobacco, a tea-spoonful of salt, a dose of castor oil, an emetic, rubbing the nose with syrup of buckthorn, &c., &c., or anything that is famed for the purpose, may have often seemed to check the disease; but no one who has been accustomed to depend on these charms can deny he has frequently witnessed their failure. That they should sometimes have seemed to do good is easily explained. In the first place, there are very few persons who know how to recognise the early symptoms of the malady; but it is usual for every young dog that is a little poorly to be pronounced sick with the distemper.

The unfounded belief that all of these animals must have the disease makes every one anticipate its advent, and tempts them to call every ailment by the name suggested by their expectations. Two-thirds, at least, of

the cases which are so quickly cured by nostrums and specifics would on inquiry prove to have been mistaken; and as, in the instances where a single dose is depended upon, nature is pretty much left to herself, the chances are that a fair share of the rest would get well of themselves. The recovery, however, could in no way be expedited by that which is credited for its accomplishment; since the little done is mostly calculated to aggravate and not to alleviate the symptoms, while there is no possibility it should eradicate the disorder.

In its character, distemper approaches very near to "continued fever" in the human subject; the chief difference being consequent upon the more delicate constitution and more irritable temperament of the dog, which prevents the two diseases from appearing exactly the same. It consists in a general fever, which produces a morbid excitement of all the mucous membranes. The digestive track is the principal seat of the disease, but of course its presence is most easily recognised at those parts which are most exposed to view. Thus the membrane of the eye, being a comparatively large surface, and by its delicacy well calculated to denote every variation of the system, is usually the first observed, and often the only place inspected. If this be cloudy or watery, the nature of the malady is at once concluded; the membrane of the nose also, though less palpable, is under observation; and if its secretion be copious and opaque, the fact is generally imagined to be established. The alterations, however, exhibited by these membranes

are no more than sympathetic derangements, they being continuous with the more important organs; and when proofs are found in the eyes or nose, the disorder is generally confirmed, or has taken hold of the system. Some have supposed the disease originated in the nose, and thence extended to other parts; now I shall not stop here to consider so groundless an hypothesis. It essentially is fever affecting the entire of the mucous surfaces, but especially those of the alimentary canal.

The causes cannot be well ascertained. Contagion has been by the majority of writers supposed to be its principal source, but I cannot say my experience has corroborated that opinion. My own little cur never had the distemper, and yet she lived where the disease was scarcely ever absent. Animals virulently affected were daily brought to me, and not a few were left in my charge. From these she was not kept separate; they were her acquaintances and companions; she played with them, and often by choice shared their beds; and nevertheless she died without exhibiting the disease. I do not generally put those dogs by themselves which are affected with distemper; yet I cannot bring to mind the instance of an animal while under my care having caught the disorder. I doubt whether there is any justice in the general opinion. It would be hard to prove the prevailing notion was a prejudice, yet there can be no doubt that it is much more insisted upon than it deserves to be.

With regard to other causes, I know of none. I have

not been able to observe that any circumstance can induce the disease, though at particular ages the animals are predisposed to its exhibition.

During the latter period of dentition—that is, when the second set of incisors are well up, and the permanent tusks are about half-grown, the temporary ones being still retained—is the time when pups are most disposed to display this disorder. I cannot state the precise age, because mouths are not regular in their appearances even as to mouths; but the aspect of the teeth will sufficiently mark the period when an individual may be expected to be attacked. The season certainly, in no little degree, influences the disease. In winter it is not usually seen; in the spring it is more common; in summer is rare, but less so than in winter. During the autumn, however, especially if much rain should fall, it is very frequent, and always more prevalent than at any other periods. Spring and autumn, therefore, are the times when it is to be looked for, but in the latter it is to be anticipated.

When treating of a subject like the present, there would seem to be a disposition to string together a number of words which do duty for information. Cold, wet, bad food, foul air, excessive exertion, fear, &c., are grouped together, and put forth for almost every “ill that flesh is heir to;” but I have to learn that these accepted terms have any connexion with the development of this disorder. Dogs that are starved, neglected, and cruelly tortured—animals that are judiciously fed, properly housed, and sensibly treated—as well as favorites that are crammed,

nursed, and humored—all equally are its victims ; and those which are most cared for fall most frequently, while those which are least prized more generally survive. If, therefore, privation or exposure be of any importance, the facts seem to infer their tendencies are either to check or mitigate the attack.

Exercise and food, however, do influence the complaint. The dog that is free suffers much less severely than the one that is confined. The animal that never tastes flesh has a much lighter attack than the one which subsists entirely upon meat. This last fact I have often proved. When the distemper has made its appearance, the opportunity for changing the diet has passed away. We have, then, only a choice of dangers. To remove the flesh to which the animal is accustomed is to cause it to pine and to weaken the strength, at a time when vigor is of every importance ; whereas to continue the meat is mostly certain death ; in this position I generally take away the flesh, for by so doing I give the patient a chance of recovery ; and however desperate that chance may be, nevertheless it is to be much preferred to no chance at all.

The symptoms in the very early stage are not well marked or by any means distinguished for their regularity. They may assume almost any form ; dulness and loss of appetite, purging, or vomiting, are very frequently the first indications. The more than usual moisture of the eyes, and a short cough, are often the earliest signs that attract attention. In the bitch a desire for copulation,

with a disinclination to accept the dog, is to be regarded with suspicion; as is also a display of peevishness and a wish to be undisturbed in full-grown animals. These things denote no more than the derangement of the system; but if, conjoined with them, the inner surface of the lower eyelid should appear to be more red than usual, and the pulse should be increased in number without being materially altered in character—ranging from one hundred and twenty to one hundred and thirty in puppies, and in dogs from one hundred and ten to one hundred and twenty-five—the probability of distemper making its appearance is the greater, though even then by no means certain.

The period of the year, however, will also have to be taken into consideration; and inquiry should always be made whether any animals in the immediate neighborhood are known to have exhibited the disorder; because the disease is then proved to be in the locality. At this stage the practitioner is always more or less in the dark; and therefore he contents himself with such measures as he concludes are adapted to the symptoms, and waits for further instructions which nature will speedily develope.

When the disease is established, the animal is sensitive to cold. It seeks warmth, and is constantly shivering; when taken hold of, it is felt to tremble violently, so much so that the pulse cannot be accurately counted. The bowels are generally constipated. A thick purulent discharge flows from the eyes; and the white around the eye, if the upper lid be retracted, will be seen covered

with numerous small and bright red vessels, giving to the part the appearance of acute inflammation. The vessels now spoken of are not to be confounded with the veins which are natural to this organ. These last are large, and of a purple hue, while their course is in the direction of the circumference of the cornea. The small vessels, indicative of distemper, are fine, bright in color, and their course is towards the centre, or in a line directly the opposite to that indicated by the veins. They are never present during health, though they are often to be witnessed in other diseases besides that which is here treated of. A glairy mucus, or yellow fluid, moistens the nostrils, and if the ear be applied to the head, the breathing will be discovered to be accompanied with an unusual sound. The cough is often severe and frequent; it is sometimes spasmodic—the fits being almost convulsive, and terminating with the ejection of a small quantity of yellow frothy liquid, which is thrown off by the stomach. The digestion is always impaired, and sickness is not unusual; the matter vomited having an offensive smell, and never being again consumed by the animal, as is generally the case when the creature is in health. The nose is dry and harsh; the coat staring and devoid of gloss: the skin hotter than is customary, and the paws warm. The pulse is perhaps quicker by twenty beats than during the prior stage, but less full—the artery feeling sharp, short, and thin under the finger.

When the symptoms described are apparent, the distemper is easily recognised, but it is not likely to con-

tinue stationary for any long period. In the course of a week it generally changes its character, and sometimes appears to subside altogether; the cases in which the disease steadily progresses, becoming day by day more severe, being comparatively rare.

When no abatement is witnessed, the case is not to be despaired of, but it requires to be anxiously watched; for often it will take a sudden turn, sometimes favorable, but more frequently demanding immediate assistance to prevent a fatal termination. The symptoms become aggravated. The eyes are clogged by a thick matter which glues the lids together, especially in the morning. The nostrils are plugged up by an accumulation of tenacious discharge, which becomes encrusted over the lips and nose, and impedes the breathing. The body rapidly wastes, though the appetite may return, and even be voracious. The shivering is constant. The dog seeks repose and is disinclined to move; though at times it may be playful, and in some instances will never exhibit any diminution of spirit. The cough may continue; but it more often ceases, or is only heard at irregular and distant intervals. The animal makes repeated and desperate efforts to expel the accumulated matter from the nose, and uses its paws evidently with an intention to remove the annoyance. Day by day, if not attended to, these signs grow more aggravated; the breath becomes very offensive; ulcers appear on the lips; the eyes become white; the discharge from the nostrils changes its color, and is mingled with blood

and scabs, having an offensive odor. The creature at last begins to "yap," or utter short sharp cries. It becomes more weak, till at length it cannot walk, but lies upon its side; the noise being continued for hours, and then ceasing only to be again commenced. Constipation has usually been present, but at last diarrhœa sets in; the fæces have that peculiar smell which in the dog is characteristic of the latest stage of all; and gradually death, without a seeming struggle, closes the scene of suffering.

More frequently—indeed, in the majority of cases—the distemper is hardly well developed before it all at once seems to disappear. This peculiarity in the disorder has no doubt given strength to the general faith in specifics for this disease. The animal suddenly so far recovers, or appears to recover, after having been seriously affected, that the inexperienced naturally conclude the dog is either quite well, or evidently so far cured that the efficacy of the remedy administered is not to be disputed. For two or three weeks this deceptive appearance may continue, and in some cases no return of the symptoms may be witnessed; but in the majority of instances the disorder is only dormant, and again starts up as if it had been strengthened by its treacherous repose. The running from the nose comes back in excessive quantities, and either the bowels are singly inflamed, or with them the brain is involved, and fits or diarrhœa, or both united, speedily terminate in death, to arrest which medicine has seldom the power. The loss

is on these occasions rarely attributed to distemper; which is thought to have been subdued; but death is commonly set down to fits, or to poison, or to inflammation of the bowels, or to anything else which the imagination of the proprietor may conceive. Hence we get an insight into the value of a large number, and perhaps into all, of the reputed nostrums; and hence it is the more necessary the reader should be made aware of those indications which denote the virus is not eradicated, but only latent as it were, lurking, to spring with greater certainty upon its victim. No one must conclude the distemper is mastered if the dog continues to lose flesh, or if the animal does not rapidly repair the waste consequent upon the earlier stages of the disorder. This tendency to stand still or decline should be carefully observed, and it will seldom deceive. When it is remarked, or even suspected, let the owner be upon his guard. When the distemper is actually overcome, there is a marked disposition to fatten; indeed, so strong is it at this time that, should it not be evident, there can be no doubt as to the cause, especially if a short and slight attack of the disorder has been known to have occurred a little time before. A warning, equally clear to those who will look for and can read it, is to be obtained from the eyes. These may be bright, and even peculiarly transparent; the face have a more animated expression than it displayed during previous health; but if the eyelids are retracted, the membranes will be found red, and the vessels before observed upon will be seen running

over the white of the eye. When these things are present, although the coat may be beautifully smooth, the discharge dried up, the shivering gone, the appetite strong, and the spirits boisterous, still there is in the system the seeds of a disease which at no distant period will reappear in its most dangerous form.

Commonly, after the second stage, there is an abatement of the symptoms, without any actual cessation in the discharges. The dog is concluded to be better, and thought to be doing well, but it will not be long before something to excite alarm is witnessed. The eyes or nerves, or lungs or liver, or stomach or intestines may be attacked; or a pustular eruption, or actual mange, or a disposition in the animal to eat its own flesh, or chorcea, or paralysis may appear, and all of these possible varieties require to be separately dwelt upon.

The eyes lose their transparency, the surface is white and opaque, the sight is impaired, and the lids are nearly constantly closed. One or both of the organs of vision may be thus affected; usually the two are simultaneously affected, but seldom with the like intensity. After a few days, and sometimes at the commencement, a small circular depression is to be seen upon the very centre of the eyeball. It is round, and varies in size from that of a pin's head to that of a small pea, but rarely becomes larger. The depression, if nothing be done to check it, deepens till a little shallow pit is exhibited. At other times the hole grows larger and deeper, till the outer covering of the eye is absorbed, or, in common phrase, is

eaten through, and the water escapes : this gives relief. If, however, the animal survives, the eye is often perfectly restored, though very frequently a white speck marks the spot which was ulcerated ; or the dog is left with weakened eyes, and has a tendency to cataract, which may ultimately render it blind.

The affection of the lungs is denoted by the dog breathing more quickly, and often making a small plaintive or whistling noise during respiration. Though cough is quite as often absent as present ; but if present it is usually severe ; the pulse is increased, but small and thready, and the appetite may not be impaired. The animal is, however, disinclined to move, if put down at liberty, it always gets into some place where it hopes to be allowed to remain undisturbed. As the symptoms become more intense, the animal constantly sits upon its haunches ; but I have not seen it carry the head erect, although authors state this to be one of the indications. There is a desire for fresh air, and the dog will always leave the house, or get to the window or door, if he have an opportunity of so doing. These signs are hardly to be mistaken, but they are easily confirmed. If the ear be applied to the side of a healthy dog's chest, no sound can be detected ; but when the lungs are diseased, a very plain noise is readily heard. The presence, therefore, of any murmur, or of anything like air escaping over a dry rough surface, is indicative of disease, and the certainty that the lungs are involved is confirmed.

Dogs of late years have not commonly died of pneu-

monia during the distemper ; but authors speak of the pulmonary form of the disorder as having formerly been a common cause of death. I know it only as a mild variation of the ordinary symptoms. It has not in any case under my observation proved fatal, but has readily yielded to gentle measures, aided by attention to simple diet.

The liver is generally involved. After the termination of a fatal case, this gland is found either soft or more brittle than it ought to be, else it is discovered much enlarged. I never saw it of less than its natural size. Generally it is discolored, mostly of a pale tint ; which sometimes exists all over the organ, though the pendulous edges of the lobes are very generally seen of the bright red, suggestive of inflammation. The gall-bladder is always distended with a thin dark-green fluid or impure bile ; and a large quantity of the same secretion, but of greater consistency, is distributed over the lining membrane of the anterior intestines. The liver obviously is the cause of the yellow distemper, which is no more than jaundice added to the original and pre-existing disease. Yellow distemper is by writers treated of as a distinct disorder, but I have not yet met with it in that form. When it has come under my notice, it has been no more than one of the many complications which the symptoms are liable to assume. The dog has been ill before his skin became discolored ; but the eyes not exhibiting that ordinary discharge which denotes the true character of the affection under which he labored, the distemper was not detected.

Everything concerning distemper is by the generality of the public misunderstood. Most people imagine a dog can have the distemper but once in its life ; whereas I had a patient that underwent three distinct attacks in one autumn, that of 1849. The majority of persons who profess an intimate knowledge of the dog will tell you distemper is a disorder peculiar to the young ; whereas I know of no age that is exempt from its attack. I have known dogs, high-bred favorites, to be left with men selected because of their supposed familiarity with dog diseases ; and these very men have brought to me the animals in the fits which are the wind-up of distemper, yet notwithstanding have been ignorant that their charges had any disease whatever. All the stages and symptoms of ordinary distemper may appear and depart unnoticed ; but it is widely different with yellow distemper, for when the yellowness appears, it is so marked that no description of a peculiar symptom need be inserted, since it cannot be overlooked or mistaken. It is attended with excessive debility, and, unless properly combated, is rapidly fatal.

The stomach and intestines are always involved ; I have never known a case in which either escaped. The affection of the first is generally shown by sickness during the earliest stage ; when also the derangement of the last is denoted by either costiveness or relaxation, the bowels never being perfectly regular ; towards the latter stages, or about the third or fourth week, the appetite sometimes becomes enormous ; the craving for food

is then unnatural, and is so intense that no quantity can appease the hunger. The animal will eat anything; dry bread is taken with avidity, and stones, cinders, straw, and every species of filth are eaten with apparent relish. Such, however, is not always the case, since it is not unusual for the appetite entirely to fail. In either instance the dog rapidly wastes; the flesh seems to melt as it were away, and the change produced by a few days is startling; from having been fat, a thinness which exposes every bone is witnessed in a shorter time than would be supposed possible. At this period vomiting may come on; but when the animal is morbidly ravenous, the stomach does not generally reject its contents. After death I have found it loaded with the most irritating substances, and always acutely inflamed; but no sickness in any instance of this kind has been observed. Vomiting is most generally absent, but the protruded and reddened appearance of the anus will give a clue to the actual condition of the alimentary tube. The stomach is inflamed, not throughout, but in various parts which are in different stages of disease. The pyloric orifice is always more affected than the cardiac; the duodenum, jejunum, and ileum, are inflamed; the cæcum is enlarged, inflamed, and generally impacted. The rectum, however, suffers most severely; it is much reddened and thickened, often to an extraordinary degree. I have known blood to be exuded from the surface of this bowel in such quantities as to destroy the life from actual hemorrhage. In one case, however, a spaniel vomited more

than half-a-pint of blood previous to its death, which took place two hours afterwards. A small quantity of blood is ordinarily passed with the fæces toward the latter stage; but in several cases a large amount of pure blood, partly coagulated and unmingled with any fæcal matter, has flowed from the body in a continued stream, to which there will be cessation only as death approaches. The possibility of this occurring will give the reader some idea of the extent and degree in which the bowels are or may be diseased; the symptoms, nevertheless, are not such as would suggest the danger which may be shortly violently exemplified. Irregularity of the intestines may be remarked; but it is not so characterised as to force itself upon the attention. The belly during distemper mostly appears tucked up and small; the intestines, even when costiveness exists, are seldom loaded, but all except the rectum may feel empty. The animal is always bound when the bowels are acutely attacked. The first indication we get of this is often colic. The cries are high and yet full at first; but they only occur at periods, between which the dog seems easy and inclined to sleep; gradually the exclamations become more sharp and short, a quantity of dark-coloured fæces are voided, and relief is for a time experienced; the cries, however, return and become continuous; diarrhœa sets in; the excretions become more and more liquid, by degrees mixed with blood, and of a lighter color. Whenever they are discharged, pain is expressed; but as the animal sinks the cries grow less frequent, till at last the

excrements pass involuntarily, and death soon takes place.

The cries, however, are not heard in every instance even of this kind, and the abdomen is not generally sensitive to pressure. When the belly is handled, the dog, by contracting the muscles covering the parts, may denote some small degree of resistance; but I have never known it to struggle during the operation. The curving of the spine, the occasional looks towards the seat of agony, and the efforts made to press or draw the belly upon the ground, will indicate the inflammatory character and the locality of the disease. The pulse does not materially aid the judgment; it becomes quicker and more sharp, but hardly to such an extent that dependence can be placed on its indications. The discharges often cease when the disease, in an acute form, becomes concentrated upon the contents of the abdomen; but the nose is almost always hot and harsh, though in a few cases I have known the part remain cold and moist even to the last. As the close draws near, a very peculiar smell, not absolutely powerful, but more sickly than offensive, is emitted. This odor is consequent upon the fæces, and when it is detected the animal seldom or never survives.

The brain, both Blaine and Youatt speak of as subject to inflammation during the latter stage of distemper. As diseases are peculiarly liable to change, and the appearances assumed at different times are by no means uniform, I may not say those estimable writers never beheld it in

such a state ; but I am certain I have never seen it in a similar condition ; I have found it congested, but far oftener have I discovered it perfectly healthy. One of its coverings (the dura mater) has exhibited a few spots of congestion, but these have been small, each not larger than the head of a moderate sized pin, and in number about ten or twelve ; generally they are situated towards the anterior of the cranium (on either side or falx), and near to the crista galli.

The bones forming the roof of the skull have, however, been highly vascular—loaded with dark blood—so that if dried they become of almost a black hue ; and without disputing the accuracy of either of the authorities I have mentioned, these appearances to my mind account more satisfactorily for symptoms which no one asserts ever border upon phrenitis. The brain seems to me to be only sympathetically affected, not absolutely involved in this disease. When this is threatened, there is generally some notice given before the fits, succeeded by stupor, are displayed. The eye will sometimes brighten, and the discharge from the nose will cease. This, however, is by no means constant ; as it is not rare for both to continue, or even to become more copious ; but if one only should remain, the nose is certain to be the part whence the deflexion will issue. No positive dependence, therefore, can be placed upon the discharges from the eye or nose. The eye, nevertheless, is certain to denote that which is on the eve of happening. The pupil may be small ; and when it is so, its decrease of size will be

marked, and it will have little disposition to enlarge. This, however, is rarely witnessed. Generally the pupil is much enlarged, so much as to conceal the iris, and alter the character of the organ. The eye is moreover retracted, and the dog has a very peculiar expression of mingled pain and stupidity. If the hand be placed upon the head, it will be sensibly hot. No matter how thick the coat may be, the heat will be apparent, and the carotid arteries will sensibly throb. The coat feels dry and is warm, although the animal may be trembling to such a degree as prevents the pulse being counted. Yet the dog seems lively; it is active now, though perhaps a little while ago it was dull; every trivial circumstance now attracts its notice. The appetite is generally ravenous. The dog which only the day before was disinclined to feed, is suddenly disposed to eat more than it ever was known to consume; and it will gnaw and swallow the hardest wood for want of better provender. The amended appetite is mostly one of the symptoms, but it is not invariably witnessed; for occasionally increased activity, and the strange appearance of the eye, are all that indicate the approach of fits. It will not be long, however, before something shall be added which is more definite in its meaning. The dog which was running about suddenly stands still, and begins to smack its lips and champ its jaw. It keeps stationary while doing this, and continues so until a quantity of froth and thick saliva falls from the mouth, drops upon the ground, and then the action ceases. The animal looks around with a vacant

stare, evidently not conscious where it is, and starts away, hitting itself perhaps against anything which may oppose its progress. If caught it struggles to get loose, and may even bite the hand which, when conscious, it would perish to defend. Almost immediately, however, it regains its faculties, and then seems quite as well as it appeared to be before the attack came on. It may continue subject to be thus seized for several days ; or soon after the first attack, fits or convulsions may start up. During the champing colic may set in, which will only yield when the fits are established. The duration of the champing is not regular ; it may be only for a few moments, or for several minutes. The attacks may be no more than one or two in the day, or twenty may occur in a single hour. Generally they remain about three days, but here also there is no rule. I have known them to be present for a week, and also to exist only for a few hours. In these latter cases the condition of the dog is generally not understood. It is taken out for a long walk, or it is indulged with a hearty meal ; and in the middle of the one, or shortly after the other, it begins to champ, utters a loud sharp cry, which is suddenly cut short as if the animal was choked. The eyes glare, the mouth is open, and before perfect insensibility ensues, the dog bites at every object near it, then falls down convulsed, the limbs stiffen, the head is drawn back or twisted to one side, the urine and dung are voided ; and a state of unconsciousness, which may cease in a few minutes, or continue for hours, during which the body is

in contortions, and the saliva flows freely from the mouth, stretches the poor brute upon the earth. When this is over, the dog recovers as from a trance, being always disposed to ramble, and should its strength permit, will start away at its utmost speed. There is neither to the number nor duration of these fits any limit; they may be few or frequent, and long or short. The second may end the life; or every five minutes, nay oftener, they may occur, and the animal survive for days. Any excitement will bring them on, and the passage of the *fæces* invariably is accompanied by an attack. *Diarrhœa* always begins when they commence, and the dog soon loses strength, and lies upon its side unconscious and incapable of motion; the pulse is not to be felt, and gradually without a struggle it expires. Let no man, however, be hasty in saying positively when death has taken place. Often has the life seemed gone, for the heart has been still; but minutes afterwards the animal has gasped, and then began to breathe once more. Death, however, comes at last, for if the dog sinks to such a state, I have never known it to revive.

A pustular eruption is often witnessed during the existence of distemper, and I have not seen the same phenomenon distinct from the disease. The two appear to be united, and yet we do not know the manner in which they are connected. The other symptoms are not mitigated when the pustules are matured, nor does their appearance denote any particular crisis or stage of the disorder. I have, however, most frequently seen

them towards the latter or confirmed stages of distemper, and often they have immediately preceded the fits. The first indication given is a little redness, which is strictly local or confined to a particular spot. This place is not very red, but, nevertheless, it is obviously inflamed and tender; there is not much swelling, but a slight hardness can be detected. A day or two afterwards the redness dies away, and a globular eminence, perfectly round, and generally about the size of a split pea, is beheld. If it be opened, a proportionate quantity of thick pus of a healthy character escapes, and a comparatively large incrustation forms over the part; if not opened, the pustule bursts and the scab follows, but larger than in the previous case. Mostly the eruption appears on the belly and inside of the thighs, but it is seldom strictly confined to those parts. Often it affects the trunk and tail, but does not usually attack the head and fore-limbs. There is no proof that any benefit attends its development, or any known reason for attributing it to any cause; save only such as can be drawn from the statement, that I have commonly observed it in pups of a weakly constitution and emaciated condition.

The disposition to eat or gnaw some part of the body is often shown to an alarming degree, but is seldom exhibited save in the latter stage of the disease. The dog is observed to lick one of its paws, or mumble at its tail, for some days. The part is always one of the extremities, and is evidently tormented with a violent itching which cannot be allayed. The animal at length, irritated by

the torture, attacks the member with its teeth, The skin is first removed, and then the flesh. The mouth may be covered with blood, the teeth clogged with hair, and the very bones attacked; but the pain which the sight of the mangled surface suggests to the spectator seems not to be felt by the dog, which appears desirous only of destroying its own body. I have known two of the toes of one fore-paw to be thus consumed, so that amputation was afterward imperative, portions of the metacarpal bones being laid bare. In several instances the root of the tail has been eaten, until the sacrum and first tail bones, with the nerves, were exposed. The rage cannot be overcome, and, unless the disposition be prevented by mechanical means, the consequence will be fatal. No author that I am acquainted with has noticed this peculiarity; and in general it is attributed to other causes than distemper, which is either not observed, or is supposed to have been got over.

Tumors on various parts of the body, and of different kinds, sometimes but not usually accompany the disease; but as I have not been able to satisfy myself they are peculiar to the disorder, or induced by any other cause than the debility attendant on distemper, there is in this place no occasion to more than point out the possibility of their appearance. They are unfavorable as indications of general weakness, but they do not seem to possess any further or direct influence over the course of the affection.

The genital organs rarely escape altogether. A thick

purulent discharge, or one of a glairy nature, is often present in the male throughout the attack, and nearly always during recovery. In both sexes the bladder in the latter stages is apt to be paralysed, and the accumulation of the urine then becomes a prominent symptom. The recovery often commences after relief has been obtained, but if the necessity be overlooked, death generally ensues.

Paralysis of the hind extremities is occasionally witnessed, and when seen is generally sudden in its appearance. Sometimes, however, the loss of power is gradual, and when such is the case the hopes of a cure are always diminished. If the power of motion be lost suddenly, costiveness mostly exists; and if, on the other hand, it should be gradual, there may be diarrhœa, which will terminate in death.

Twitches, choræa, or Saint Vitus's dance, are not very usual, and may continue for months after every other symptom has subsided. All four limbs are sometimes violently agitated, and even during sleep are not quiescent. The motion is incessant, and when this is the case the animal dies, worn out by the want of bodily rest. In the majority of instances only one limb is affected; and a species of independence of volition, or incapability of controlling its movements, accompanies the affection. Though never still, the leg is comparatively useless, and is carried in a manner which denotes this fact. The muscles of the trunk are less commonly attacked, but they do not always escape. When the legs have not

been thus affected, I have known the abdominal and thoracic muscles to be troubled by continuous twitchings; which, however, have been for the most part slight, and have subsided more quickly than have those of the extremities, when they have been diseased. Cholera comes on gradually; its commencement is hardly to be perceived, and it is seldom observed before the distemper is fully developed—even sometimes only when the disorder appears to be subsiding. It is not rare for it to start up while the animal is apparently recovering; and when it does so, it is always most difficult to remove. No pain is felt in the affected limb; the part rather seems to lose some portion of its sensibility.

When the hind parts are paralysed, feeling may be entirely gone; so that a pin thrust into the flesh of those parts does not even attract the notice of the dog. This does not occur in *choræa*, but the consciousness is dulled by that affection. The convulsed limb may be more roughly handled than the healthy ones; but violence will excite those answers which truly indicate that insensibility is not established in it. If nothing be done for the twitchings, the limb will waste; at last the general system will be sympathetically involved, and the body will grow thin. This, however, may not happen until long after all signs of distemper have disappeared; for *choræa*, though well known to be often fatal, is always slow in its progress, and never attended with immediate danger.

Such is an outline of the leading symptoms; and it

now remains only to more particularly point out those which indicate death and denote recovery. The third or fourth week is the time when the dog mostly dies, if the disorder terminates fatally; and six weeks is the average continuance of the attack. Rapid loss of flesh is always a bad sign, and it is worse in proportion as the appetite is good, because then nature has lost the power of appropriation. The presence of vermin is likewise a circumstance which in some measure is deserving of notice. If a dog becomes, during the existence of this disorder, unusually infested with fleas, or more especially if lice all at once cover its coat,—as these parasites ever abound where the body is debilitated and the system unhealthy,—they are at such a period particularly ominous. The coat cannot, while the disease prevails, be expected to look sleek; but when it becomes more than usually harsh, and is decidedly foul, having a peculiar smell, which is communicated to the hand when it is passed over the body, the anticipations are not bright. The most marked indication is, however, given by the tongue. When this is only a little whiter than it was in health, we may hope for recovery; but if it becomes coated, discolored, and red and dry at its tip and edges, the worst may be foretold. The warning is the more decided if the breath be hot and tainted, and the belly and feet cold to the touch. While the dog can stand and walk, however feebly, there is no reason to despair; but when it falls down, and lies upon its side, rarely is medicine of much avail. Even then, however, it will some-

times recover; but if, while in this state, injections are returned as soon as they are administered, the chance that it can survive is indeed remote.

Recovery, in extreme cases, usually commences after diarrhœa which had set in has subsided, rather than during its attack. This is the only semblance to anything approaching a crisis which has come hither under my observation. If simultaneously the eyes lose their red and glassy aspect, and the cough returns, the danger may be supposed to have been passed. For weeks, however, the animal will require attention; for the convalescence is often more difficult to master than the disease itself is to cure; and relapses, always more dangerous than the original attack, are by no means unusual. The recovery may not be perfect before one or even two months have expired; but usually it is rapid, and the health is better than it was previous to the disease. A dog which would before never make flesh, having had the distemper, will often become fat. I once tried all in my power to relieve a Newfoundland dog of worms, but though I persisted for months, I was at last reluctantly obliged to admit the case was beyond any treatment I dared employ. A fortnight after I had given it up, the same animal was brought to me, suffering under evident distemper. I was not displeased to see it in that state, for I felt I could overcome the disease; and I told the proprietor that with the distemper the worms would depart. So it proved, and the dog has not since been subject to the annoyance.

When the violence of the disorder has declined, the skin generally peels, the cuticle is cut off, and the hair is scurfy. I have even known the soles of the feet to cast their outer covering, and in one case three of the nails were shed. The teeth, also, are coated with a thick fur, and the breath is offensive; but as the strength returns at the same time, these circumstances are not to be viewed in a serious light. In one or two instances, where the system seemed to be so shaken that it retained no strength to cast off the lingering remnant of the distemper, mange has burst forth, and proceeded very rapidly; but it yielded with equal speed to mild external remedies, and is therefore only to be feared inasmuch as it disfigures the dog for a time, retarding the ultimate restoration to health by further taxing the enfeebled body.

During the recovery from distemper, small and delicate animals—terriers and spaniels—are very liable to faint; the dog is lively, perhaps excited, when suddenly it falls upon its side, and all its limbs stiffen. A series of these attacks may follow one another, though generally one only occurs; when numerous and rapid, there is some danger, but, as a general rule, little apprehension need be entertained. The fainting fits are of some consequence, if they exist during a sickening for, or maturing of, distemper. In pups that have not passed the climax of the disease, they are not unseldom the cause of death; but, even in that case, I have never been convinced that the measures adopted for the relief did not kill quite as

much or even more than the affection. When the symptom is mistaken, and wrong remedies are resorted to, the fainting fit will often continue for hours, or never be overcome. When let alone, the attack mostly does not last longer than a quarter of an hour, and under judicious treatment the consciousness almost immediately returns. When the fainting fits occur during the progress or advance of the disease—that is, before the symptoms have begun to amend—it is usually preceded by signs of aggravation. For twelve or twenty-four hours previously the dog is perceptibly worse; it may moan or cry, and yet no organ seems to be decidedly affected more seriously than it was before. I attribute the sounds made to headache; and, confirming this opinion, there is always some heat at the scalp. The animal is dull, but immediately before the collapse it attempts to wander, and has begun to move, probably panting at the same time, when it falls without a cry, and stiffens. In this state—the rigidity occasionally being less, but the unconsciousness continuing unchanged—it will remain; the eyes are turned upward or into the skull, the gums and tongue are pallid, the legs and belly cold: the appearances are those of approaching death, which, unless relief is afforded, may in a short time take place. When the fainting occurs after convalescence is established, the attack is sudden, the symptoms are less violent, and the coma of shorter duration. In this last case there is generally little danger, but there is always sufficient reason for alarm, and help ought never to be delayed. These

attacks are commonly confounded with true distemper fits, from which they are altogether distinct; and from which they may be readily distinguished by the absence of the champing of the jaw, the want of any disposition to bite, the immediate insensibility which ensues, the shrieks not being heard, and the urine or fæces not being voided. Nevertheless, the two are usually confounded, and hence many persons are found asserting that distemper fits are easily cured; and several dogs have been shown to me at different times, which their owners were confident had been attacked by distemper fits, and radically cured by the most simple, and often ridiculous specifics. I have sometimes in despair—even against my reason—tried these boasted remedies, but in no instance has the result rewarded me. Where there was real occasion for a potent medicine, and little hope that any drug could benefit, the nostrums have, without a single exception, belied the confident recommendations with which they were offered, and either have done harm or proved inoperative.

The symptoms of distemper, as the reader will, after wading through the foregoing description, have perceived, are numerous and complicated; they admit of no positive arrangement, being both eccentric in their order and appearances. Redness of the eyes, with discharge from both eyes and nose, accompanied with ordinary signs of illness, are the early indications; but even these are not to be sought for, or to be expected in any single form. The judgment must be exercised, and study strengthened

by experience will alone enable any man to pronounce the presence of distemper in many cases ; while, perhaps, without knowledge or practice any person may recognise it in the generality of instances.

The treatment is rendered the more difficult because of the insidious nature of the disorder, and the uncertain character of its symptoms ; under such circumstances, it is no easy task to make perfectly clear those instructions I am about to give. I am in possession of no specific ; I do not pretend to teach how to conjure ; I am going only to lay down certain rules which, if judiciously applied, will tend to take from this disease that fatal reputation which it has hitherto acquired. I shall be obliged, however, to leave much to the discretion of the reader ; for it would employ too great a space, did I attempt to make provision for all possible accidents and probable combinations.

The diet is of all importance ; it must be strictly attended to. In the first place, meat or flesh must be withheld. Boiled rice, with a little broth from which the fat has been removed, may be the food of a weakly animal, but for the majority bread and milk will be sufficient ; whichever is employed must be given perfectly cold. Sugar, butter, sweet biscuits, meat, gravy, greens, tea or pot liquor—either luxuries or trash—must be scrupulously denied in any quantity, however small. Skim-milk, if perfectly sweet, is to be preferred, and coarse bread or ship biscuits are better than the same articles of a finer quality. These will form the diet, when the dog can be

brought to accept them ; and to rice, the favorite—however great may be the pity he elicits, or however urgent may be his solicitations for a more liberal fare—must be rigidly confined. If, after a few trials, the dog stubbornly refuses such provender, meat must of necessity be given, but it should be of the very best description, and rather underdone. Of this kind, it ought to be minced, and mixed with so much rice or ship biscuit as the animal can at first be made to eat with it ; the rice or biscuit may then be gradually increased ; and in the end the vegetable substance will constitute, at all events, the major part of the support. Water, constantly changed—a circumstance too little attended to where dogs are concerned—must be the only drink ; the bed must be warm and dry, but airy. Cleanliness cannot be carried to too nice an extent ; here the most fastidious attention is not out of place. Let the kennel be daily cleared, and the bed regularly changed at least thrice-a-week ; straw or hay is better for the dog to sleep upon than cushions or blankets, which, being more expensive, are not so frequently replaced. Too much hay or straw cannot be allowed, but, on the other hand, it is difficult to regulate the quantity of the finer articles. In the last kind of bed the animal is often almost smothered, or else he scrapes them into a lump, and lies shivering on the top ; whereas, when he has straw to lie upon, he can either creep beneath it, and shelter himself when sensible of cold, or expose himself to the air when oppressed by the fever. The sensations being the only guide, it is best to leave the

dog, as much as possible, capable of obeying its instinct ; but always let the bed be ample, as during the night the shivering generally prevails, and the cold fit is entirely independent of the heat to be felt at the skin, or the temperature of the season. Let the dog be kept away from the fire, for, if permitted, it will creep to the hearth, and may be injured by the falling cinders, when the burn will not perhaps readily heal. A cold or rather cool place is to be selected—one protected from wet, free from damp, and not exposed to wind or draughts. The kennel, if properly constructed, is the better house, for dogs do best in the open air ; the only objection to which is, the chance it offers of the animal being drenched with rain. If the kennel can be placed under an open outhouse, I should always have it put there ; and what else I would recommend is, of course, told by the line of conduct which I pursue.

Medicinal measures are not to be so quickly settled. A constant change of the agents employed will be imperative, and the practitioner must be prepared to meet every symptom as it appears. The treatment is almost wholly regulated by the symptoms, and as the last are various, of course the mode of vanquishing them cannot be uniform. To guide us, however, there is the well-known fact, the disease we have to subdue is of a febrile kind, and has a decided tendency to assume a typhoid character ; therefore, whatever is done must be of a description not likely to exhaust,—depletion is altogether out of the question. The object we have to keep in view is the

support of nature, and the husbanding of those powers which the malady is certain to prey upon : in proportion as this is done, so will be the issue. In the very early stage, purgatives or emetics are admissible. If a dog is brought to me with reddened eyes, but no discharge, and the owner does no more with regard to the animal than complain of dulness, a want of appetite, and a desire to creep to the warmth, then I give a mild emetic such as is directed, page 119 ; and this I repeat for three successive mornings ; on the fourth day administering a gentle purge, as ordered, page 116. The tartar emetic solution and purgative pills I employ for these purposes, in preference to castor oil or ipecacuanha, and during the same time I prescribe the following pills :—

Ext. belladonna . . .	Six to twenty-four grains.
Nitre	One to four scruples.
Extract of gentian . .	One to four drachms.
Powdered quassia . .	A sufficiency.

Make into twenty-four pills, and give three daily ; choosing the lowest amount specified, or the intermediate quantities, according to the size of the animal.

Often under this treatment the disease will appear to be suddenly cut short. With the action of the purgative, or even before it has acted, all the symptoms will disappear, and nothing remains which seems to say any further treatment is required. I never rest here, for experience has taught me that these appearances are deceptive, and the disorder has a disposition to return. Consequently

strict injunctions are given as to diet, and a course of tonics is adopted :—

Disulphate of quinine .	One to four scruples.
Sulphate of iron . . .	One to four scruples.
Extract of gentian . .	Two to eight drachms.
Powdered quassia. . .	A sufficiency.

Make into twenty pills, and give three daily.

At the same time I give the liquor arsenicalis, which I prepare not exactly as is directed to be made by the London pharmacopœia, but after the following method :—

Take any quantity of arsenious acid, and adding to it so much distilled water as will constitute one ounce of the fluid to every four grains of the substance, put the two into a glass vessel. To these put a quantity of carbonate of potash equal to that of the acid, and let the whole boil until the liquid is perfectly clear. The strength is the same as the preparation used in human practice ; the only difference is, the coloring and flavoring ingredients are omitted, because they render the medicine distasteful to the dog. The dose for the dog is from one drop to three drops ; it may be carried higher, but should not be used in greater strength, when a tonic or febrifuge effect only is desired.

Of the liquor arsenicalis I take ten or twenty drops, and adding one ounce of distilled water, mingled with a little simple syrup, I order a teaspoonful to be given thrice daily with the pills, or in a little milk, or in any fluid the creature is fond of. The taste being pleasant, the dog does not object to this physic, and it is of all im-

portance that it should be annoyed at this time as little as may be possible.

Numerous are the cases which have thus been shortened by this method; and the advantage gained by this mode of treatment is, that if the measures employed be not absolutely necessary, they do no harm, and if required, they are those which are calculated to mitigate the violence of the disease; so for three or four weeks I pursue this course, and should all then appear well, I dismiss the case.

Most generally, however, the dogs brought to us with the distemper have the disease fairly established before we see them. Then I never purge or vomit: the time when such agents could be remedial has passed, and if now used, though they will seem to do some immediate good, the after consequences are always to be regretted. The action of the purgative has scarcely subsided before the distemper assumes a more virulent form, and the probability of the termination is rendered more dark. During the distemper I pay little attention to the bowels; and, however great may be the costiveness, I never venture to resort even to a laxative, though, should I discover the rectum to be impacted with hard fæces, an enema may be employed. That which I use on these occasions is composed of gruel, to which some sulphuric ether and laudanum has been added.

Take of cold gruel One quart.

Sulphuric ether . . . Four drachms.

Laudanum One scruple.

The above quantity will be ample for the largest dog—one-eighth will be enough for a small animal—and for a mere pup, an ounce of the fluid is often sufficient. In these cases, however, I always continue the injection until it is returned, the object not being to have it retained ; but simply to lubricate the part, and thereby facilitate the passage of the fæces, while by distending the rectum, that intestine is stimulated to expel its contents. The ether and laudanum are introduced to guard against the possibility of irritation. If a more than usual disposition to costiveness be observed, twice a week a meal of liver, chopped very fine, is allowed ; but even this should be given only after there is absolute proof of its necessity.

Of the cough, however distressing it may be, I take no notice. I do nothing for its relief, but persevere in the tonic treatment, and become more strict in my directions concerning diet. The cough is only one of the symptoms attendant on the disorder, and the measures likely to mitigate its severity will aggravate the disease ; while by attacking the disorder, we destroy the cause, and with that the effect also disappears.

The eyes I treat, or rather refuse to treat, upon the same principle. Whatever may be the appearance they present—even though the animal should be actually blind, the eye of a dull thick white color on its entire surface, and the centre of the cornea ulcerated—nevertheless I let them alone, and turn a deaf ear to the entreaties which call on me to relieve so terrible an affliction : I forbid even the discharge to be washed off. Nothing must

go near them; but the treatment must be pursued as though we were ignorant that the parts were affected. Any excessive accumulation may be gently picked off with the fingers once a-day; but even this must be performed with the utmost caution, and in most instances had better be let alone. It can only be necessary in dogs that have very long hair which becomes matted and glued together upon the cheeks; for other animals it is not imperative. If the lids should be stuck together, the fastening substance may be removed; but it should not be too quickly done even then. All water, either warm, tepid, or cold—every kind of lotion, or any sort of salve or powder—will do harm, by either weakening or irritating the organs. As to bleeding, blistering, and setoning, which have been advised, they are contrary to the dictates of humanity, and as a necessary consequence, are injurious. In medicine, at least with the dog, that which is not kind is not good. With these animals the feelings are much safer than the reason; and a lady, consulting the impulses of her heart, would be more likely to save her favorite than a veterinary surgeon, who proceeded upon the practice of that which he supposed was his science. Let the eyes of the sufferer alone—we cannot alleviate the pain, or shorten its duration. The disease regulates the torture, and to that we must give attention. If the distemper is conquered, the sight will mostly be restored; but if the eyes are tampered with, consequences may ensue which are not natural to the disease, but are induced by the crude and cruel prejudices

of the doctor. The man who, during distemper, seeing an ulcer upon the cornea, under the imagination that by so doing he will set up a healthy action, presumes to touch it with lunar caustic, will in the resistance of the poor patient be rebuked, and, by the humour of the eye squirting into his face, probably be informed that he has accomplished the very object he intended to prevent, while a fungoid mass will spring up to commemorate his achievement.

When the lungs are attacked, all kinds of mistaken cruelties have been perpetrated. No wonder the disease has been so fatal, when it has been so little understood. I cannot conceive that any dog could survive the measures I was by my college tutor taught to pursue, or the plan which books told me to adopt. Needlessly severe, calculated to strengthen the disease, and to decrease the power of the animal to survive, as the general practice decidedly is, I entreat the reader to reject it. In truth, the involvement of the lungs is in distemper a very slight affair ; no symptom yields more quickly or to milder means. Do not forget the diet, but let it be both low and small. The system cannot endure depletion, therefore we must gain whatever we can through abstinence. Do not starve, but be cautious not to cram the animal ; only keep it so short that it remains always hungry. The meal must now never be full, or sufficient to satisfy the appetite, which is usually large. A loaded stomach would do much injury, therefore little and often is the rule. The amount for the day must be cut off in the morning ; and during

the day, at as many times as the owner pleases, it may little by little be offered, but no more must be allowed. If the dog should not be inclined to eat, which is not often the case at this particular period, the circumstance is hardly to be regretted; he is not, save under the direction of one qualified to give such an order, to be enticed or forced. As for medicine, let the following pill be given thrice daily :—

Extract of belladonna . .	One to four grains.
Nitre	Three to eight grains.
James's powder . . .	One to four grains.
Conserve of roses . . .	A sufficiency.

This will be the quantity for one pill; but a better effect is produced if the medicine be administered in smaller doses, and at shorter intervals. If the dog can be constantly attended to, and does not resist the exhibition of pills, or will swallow them readily when concealed in a bit of meat, the following may be given every hour :—

Extract of belladonna . .	A quarter grain to one grain.
Nitre	One to four grains.
James's powder . . .	A quarter grain to one grain.
Conserve of roses . . .	A sufficiency.

With these a very little of the tincture of aconite may be also blended, not more than one drop to four pills. The tonics ought during the time to be discontinued, and the chest should be daily auscultated to learn when the

symptoms subside. So soon as a marked change is observed, the tonic treatment must be resumed, nor need we wait until all signs of chest affection have disappeared. When the more active stage is mastered by strengthening the system, the cure is often hastened; but the animal should be watched, as sometimes the affection will return. More frequently, however, while the lungs engross attention, the eyes become disordered. When such is the case, the tonics may be at once resorted to; for then there is little fear but the disease is leaving the chest to involve other structures.

Diarrhœa may next start up. If it appears, let ether and laudanum be immediately administered, both by the mouth and by injection. To one pint of gruel add two ounces of sulphuric ether, and four scruples of the tincture of opium; shake them well together. From half an ounce to a quarter of a pint of this may be employed as an enema, which should be administered with great gentleness, as the desire is that it should be retained. This should be repeated every third hour, or oftener if the symptoms seem urgent, and there is much straining after the motions. From a tablespoonful to four times that quantity of the ether and laudanum mixture, in a small quantity of simple syrup, may be given every second hour by the mouth; but if there is any indication of colic, the dose may be repeated every hour or half hour; and I have occasionally given a second dose when only ten minutes have elapsed. Should the purgation continue, and the pain subside, from five to twenty drops of liquor

potassæ may be added to every dose of ether given by the mouth ; which, when there is no colic, should be once in three hours, and the pills directed below may be exhibited at the same time :—

Prepared chalk . . .	Five grains to one scruple.
Powdered ginger . . .	Three to ten grains.
Powdered carraways . .	Three to ten grains.
Powdered capsicums . .	One to four grains.
Confection of roses . .	A sufficiency.

To the foregoing, from two to eight grains of powdered catechu may be added should it seem to be required, but it is not generally needed. Opium more than has been recommended, in this stage, is not usually beneficial ; and, save in conjunction with ether, which appears to deprive it of its injurious property, I am not in the habit of employing it.

I have been more full in my directions for diarrhœa than was perhaps required by the majority of cases. Under the administration of the ether only I am, therefore, never in a hurry to resort even to the liquor potassæ, which, however, I use some time before I employ the astringent pills, and during the whole period I persevere with the tonic. The diet I restrict to strong beef tea, thickened with ground rice, and nothing of a solid nature is allowed. Should these measures not arrest the purgation, but the fæces become offensive, chloride of zinc is introduced into the injection, and also into the ether given by the mouth. With the first, from a teaspoonful to a

tablespoonful of the solution is combined, and with the last half those quantities is blended. A wash, composed of two ounces of the solution of the chloride to a pint of cold water, is also made use of to cleanse the anus, about which, and the root of the tail, the fæces have a tendency to accumulate. Warm turpentine I have sometimes with advantage had repeatedly held to the abdomen, by means of flannels heated and then dipt into the oil, which is afterwards wrung out. This, however, is apt to be energetic in its action ; but that circumstance offers no objection to its employment. When it causes much pain, it may be discontinued, and with the less regret, as the necessity is the less in proportion as the sensibility is the greater. Should it even produce no indication of uneasiness, it must nevertheless not be carried too far, since on the dog it will cause serious irritation if injudiciously employed ; and we may then have the consequences of the application to contend with added to the effects of the disease. When it produces violent irritation, a wash made of a drachm of the carbonate of ammonia to half a pint of water may be applied to the surface ; and when the inflammation subsides, the part may be dressed with spermaceti ointment. The fits are more to be dreaded than any other symptom ; when fairly established, they are seldom mastered. I have no occasion to boast of the success of my treatment of these fits. All I can advance in favor of my practice is, that it does sometimes save the life, and certainly alleviates the sufferings of the patient ; while of that plan of treatment

which is generally recommended and pursued, I can confidently assert it always destroys, adding torture to the pains of death. In my hands not more than one in ten are relieved, but when I followed the custom of Blaine none ever lived,—the fate was sealed, and its horrors were increased by the folly and ignorance of him who was employed to watch over, and was supposed to be able to control. Let the owners of dogs, when these animals have true distemper fits, rather cut short their lives than allow the creatures to be tampered with for no earthly prospect. I have no hesitation when saying this ; the doom of the dog with distemper fits may be regarded as sealed ; and medicine, which will seldom save, should be studied chiefly as a means of lessening the last agonies. In this light alone can I recommend the practice I am in the habit of adopting. When under it any animal recovers, the result is rather to be attributed to the powers of nature than to be ascribed to the virtues of medicine ; which by the frequency of its failure shows that its potency is subservient to many circumstances. Blaine and Youatt, both by the terms in which they speak of, and the directions they lay down for, the cure of distemper fits, evidently did not understand the pathology of this form of the disease. These authors seem to argue that the fits are a separate disease, and not the symptoms only of an existing disorder. The treatment they order is depletive, whereas, the attacks appearing only after the distemper has exhausted the strength, a little reflection convinces us the fits are the results of

weakness. Their views are mistaken, and their remedies are prejudicial. They speak of distemper being sometimes ushered in by a fit, and their language implies that the convulsions, sometimes seen at the first period, are identical with those witnessed only during the latest stages. This is not the fact. A fit may be observed before the appearance of the distemper; and anything which, like a fit, shows the system to be deranged, may predispose the animal to be affected; but, between fits of any kind, and the termination of the affection in relation to distemper, there is no reason to imagine there is an absolute connexion. The true distemper fit is never observed early—at least, I have never beheld it—before the expiration of the third week; and I am happy in being able to add, that when my directions have from the first been followed, I have never known an instance in which the fits have started up. Therefore, if seldom to be cured, I have cause to think they may be generally prevented.

When the symptoms denote the probable appearance of fits, although the appetite should be craving, the food must be light and spare. At the Veterinary College, the pupils are taught that the increase of the appetite at this particular period is a benevolent provision to strengthen the body for the approaching trial. Nature, foreseeing the struggle her creature is doomed to undergo—the teacher used to say—gives a desire for food, that the body may have vigor to endure it; and the young gentlemen are advised, therefore, to gratify the cravings of

the dog. This is sad nonsense, which pretends to comprehend those motives that are far beyond mortal recognition. We cannot read the intentions of every human mind, and it displays presumption when we pretend to understand the designs of Providence. There are subjects upon which prudence would enjoin silence. The voracity is excessive, but it is a morbid prompting. When the fits are threatened, the stomach is either acutely inflamed, or in places actually sore, the cuticle being removed, and the surface raw. After a full meal at such a period, a fit may follow, or continuous cries may evidence the pain which it inflicts. Nothing solid should be allowed; the strongest animal jelly, in which arrowroot or ground rice is mixed, must constitute the diet; and this must be perfectly cold before the dog is permitted to touch it: the quantity may be large, but the amount given at one time must be small. A little pup should have the essence of at least a pound of beef in the course of the day, and a Newfoundland or mastiff would require eight times that weight of nutriment: this should be given little by little, a portion every hour, and nothing more save water must be placed within the animal's reach. The bed must not be hay or straw, nor must any wooden utensil be at hand; for there is a disposition to eat such things. A strong canvas bag, lightly filled with sweet hay, answers the purpose best; but if the slightest inclination to gnaw is observed, a bare floor is preferable. The muzzle does not answer; for it irritates the temper which sickness has rendered sensitive. Therefore no

restraint, or as little as is consonant with the circumstances, must be enforced. Emetics are not indicated. Could we know with certainty that the stomach was loaded with foreign matters, necessity would oblige their use ; but there can be no knowledge of this fact—and of themselves these agents are at this time most injurious. Purgatives are poisons now. There is always apparent constipation ; but it is confined only to the posterior intestine, and is only mechanical. Diarrhœa is certain to commence when the rectum is unloaded, and nothing likely to irritate the intestines is admissible. The fluid food will have all the aperient effect that can be desired. As to setons, they are useless during the active stage ; and if continued after it has passed, they annoy and weaken the poor patient : in fact, nothing must be done which has not hitherto been proposed.

When signs indicative of approaching fits are remarked, small doses of mercury and ipecacuanha should be administered.

Grey powder Five grains to one scruple.

Ipecacuanha One to four grains.

Give the above thrice daily ; but if it produces sickness, let the quantity at the next dose be one-half.

Tincture of hyoscyamus. One part.

Sulphuric ether . . . Three parts.

This should be mixed with cold soup, ten ounces of which should be mingled with one ounce of the medicine

Give an ounce every hour to a small dog, and four ounces to the largest animal. A full enema of the solution of soap should be thrown up ; and the rectum having been emptied, an ounce or four ounces of the sulphuric ether and hyoseyamus mixture ought to be injected every hour. Over the anterior part of the forehead, from one to four leeches may be applied. To do this the hair must be cut close, and the parts shaved ; then, with a pair of scissors, the skin must be snipped through, and the leech put to the wound : after tasting the blood it will take hold. To the nape of the neck a small blister may be applied ; and if it rises, the hope will mount with it. A blister is altogether preferable to a seton ; the one acts as a derivative, by drawing the blood immediately to the surface without producing absolute inflammation, which the other as a foreign body violently excites. The effects of vesicants are speedy, those of setons are remote ; and I have seen fearful spectacles induced by their employment. With dogs setons are never safe ; for these animals, with their teeth or claws, are nearly certain to tear them out. In cases of fits, if the seton causes much discharge, it is debilitating and also offensive to the dog, and the ends of the tape are to him an incessant annoyance. It is not my practice to employ setons, being convinced that those agents are not beneficial to the canine race ; but to blisters, which on these animals are seldom used, I have little objection. With the ammonia and cantharides, turpentine and mustard, we have so much variety, both as to strength and speed of

action, that we can suit the remedy to the circumstances, which, in the instance of a creature so sensitive and irritable as the dog, is of all importance. The blister which I employ in distemper fits is composed of equal parts of liquor ammoniæ and camphorated spirits. I saturate a piece of sponge or piline with this compound ; and having removed the hair, I apply it to the nape of the neck, where it is retained from five to fifteen minutes, according to the effect it appears to produce. Great relief is often obtained by this practice ; and should it be necessary, I sometimes repeat the application a little lower down towards the shoulders, but never on the same place ; for even though no apparent rubefaction may be discerned, the deeper seated structures are apt to be affected, and should the animal survive, serious sloughing may follow, if the blister be repeated too quickly on one part.

The directions given above apply to that stage when the eye and other symptoms indicate the approach of fits, or when the champing has commenced. The tonic pills and liquor arsenicalis may also then be continued ; but when the fits have positively occurred, other measures must be adopted. If colic should attack the animal, laudanum must be administered, and in small but repeated doses, until the pain is dismissed. Opium is of itself objectionable ; but the drug does less injury than does the suffering, and, therefore, we choose between the two evils. From five to twenty drops of the tincture, combined with half-a-drachm to two drachms of sulphuric

ether, may be given every half-hour during the paroxysm ; and either the dose diminished or the intervals increased as the agony lessens, the animal being at the same time constantly watched. The ethereal enemas should be simultaneously exhibited, and repeated every half-hour. When a fit occurs, nothing should during its existence be given by the mouth, except with the stomach-pump, or by means of a large-sized catheter introduced into the pharynx. Unless this precaution be taken, there is much danger of the fluid being carried into the lungs. Ether by injection, however, is of every service, and where the proper instruments are at hand, it ought also to be given by the mouth. The doses have been described. To the liquor arsenicalis, from half a drop to two drops of the tincture of aconite may with every dose be blended ; and the solution of the chloride of lime should be mingled with the injections, as ordered for diarrhœa, which, if not present, is certain to be near at hand. The following may also be exhibited, either as a soft mass or as a fluid mixture :—

Chlorate of potash . . . One to four grains.

Aromatic powder . . . Half-a-drachm to two drachms.

Or,

Carbonate of ammonia . Five grains to a scruple.

Chalk One to four scruples.

Aromatic confection . . One to four scruples.

Either of the above may be tried every third hour, but on no account ought the warm bath to be used. An

embrocation, as directed for rheumatism, may be employed to the feet and legs, and warm turpentine may, as described in diarrhœa, be used to the abdomen. Cold or evaporating lotions to the head are of service, but unless they can be continuously applied, they do harm. Their action must be prolonged and kept up night and day, or they had better not be employed, as the reaction they provoke is excessive. Cold water dashed upon the head during the fit does no good, but rather seems to produce evil. The shock often aggravates the convulsions; and the wet which soon dries upon the skull is followed by a marked increase of temperature; while, remaining upon other parts, and chilling these, it drives the blood to the head.

From the foregoing, it will have been seen that my efforts are chiefly directed to strengthening the system, and, so far as possible, avoiding anything that might add to the irritability. On these principles I have sometimes succeeded, and most often when the fits have been caused by some foreign substance in the stomach or intestines. When such is the case, the fits are mostly short and frequent. One dog that had one of these attacks, which did not last above forty seconds every five minutes, and was very noisy, lived in pain for two days, and then passed a peach-stone, from which moment it began to recover, and is now alive. In another case, a nail was vomited, and the animal from that time commenced improving. In this instance an emetic would have been of benefit; but such occurrences are rare, and the emetic

does not, even when required, do the same good as is produced by the natural ejection of the offending agent. Perhaps, where nature possesses the strength to cast off the cause of the distress, there is more power indicated ; but after an emetic, I have known a dog fall upon its side, and never rise again.

During fits the dog should be confined, to prevent its exhausting itself by wandering about. A large basket is best suited for this purpose. It should be so large as not to incommode the animal, and high enough to allow the dog to stand up without hitting its head. A box is too close ; and, besides the objection it presents with regard to air, it does not allow the liquids ejected to drain off.

For the pustular eruption peculiar to distemper, I apply no remedy. When the pustules are matured I open them, but I am not certain any great benefit results from this practice. If the disorder terminates favorably the symptom disappears ; and, beyond giving a little additional food, perhaps allowing one meal of meat, from one ounce to six ounces, I positively do nothing in these cases. I must confess I do not understand this eruption ; and in medicine, if you are not certain what you should do, it is always safest to do nothing.

The disposition to eat or gnaw any part of the body must be counteracted by mechanical measures. The limb or tail must be encased with leather or gutta percha. No application containing aloes, or any drug the dog distastes, will be of any avail. When the flesh is not sensitive, the palate is not nice, and the dog will eat away in spite of

any seasoning. A mechanical obstruction is the only check that can be depended upon. A muzzle must be employed, if nothing else can be used ; but generally a leather boot, or gutta percha case moulded to the part, has answered admirably. To the immediate place I apply a piece of wet lint, over which is put some oil silk, and the rag is kept constantly moist. The dose of the liquor arsenicalis is increased by one-fourth or one-half, and in a few days the morbid desire to injure itself ceases. After this the dressings are continued ; and only when the recovery is perfect do I attempt to operate, no matter how serious may be the wound, or how terrible, short of mortifying, it may appear.

Tumors must be treated upon general principles : and only regarded as reasons for supporting the strength. They require no special directions at this place, but the reader is referred to that portion of the work in which they are dwelt upon.

To the genital organs of the male, when the discharge is abundant, a wash consisting of a drachm of the solution of the chloride of zinc to an ounce of water, gently applied once or twice daily, is all that will be necessary. The paralysis of the bladder requires immediate attention. In the last stage, when exhaustion sets in, it is nearly always paralysed. Sometimes the retention of urine constitutes the leading and most serious symptom ; and after the water has been once drawn off, the bladder may regain its tone—another operation rarely being needed. A professional friend, formerly my pupil,

brought to me a dog which exhibited symptoms he could not interpret; it was in the advanced stage of distemper. It was disinclined to move, and appeared almost as if its hind legs were partially paralysed. I detected the bladder was distended, and though the animal did not weigh more than eight pounds, nine ounces and a half of urine were taken away by means of the catheter. From that time it improved, and is now well. There can be no doubt that a few hours' delay in that case would have sealed the fate of the dog. For the manner of introducing the catheter, and the way to discover when the urine is retained, the reader is referred to that part of the present work which treats especially on this subject.

Paralysis and choræa will be here dismissed with a like remark. To those diseases the reader must turn for their treatment; but I must here state, that before any measures specially intended to relieve either are adopted, the original disease should be first subdued, as, in many cases, with the last the choræa will disappear; while in some the twitching will remain through life. All that may be attempted during the existence of distemper, will consist in the addition of from a quarter of a grain to a grain and a half of powdered nux vomica to the tonic pills; and, in severe paralysis, the use of a little friction, with a mild embrocation to the loins.

The treatment during convalescence is by no means to be despised, for here we have to restore the strength, and, while we do so, to guard against a relapse. One circumstance must not be lost sight of; namely, that nature is,

after the disease has spent its violence, always anxious to repair the damage it may have inflicted. Bearing this in mind, much of our labor will be lightened, and more than ever shall we be satisfied to play second in the business. The less we do the better ; but, nevertheless, there remains something which will not let us continue perfectly idle.

Never, after danger has seemingly passed, permit the animal to return all at once to flesh food. For some time, after all signs of the disease have entirely disappeared, let vegetables form a part, and a good part of the diet. Do not let the animal gorge itself. However lively it may seem to be, and however eager may be its hunger, let the quantity be proportioned to the requirements independent of the voracity. Above all, do not tempt and coax the dog to eat, under the foolish idea that the body will strengthen or fatten, because a great deal is taken into the stomach. We are not nourished by what we swallow, but by that which we digest ; and too much, by distending the stomach and loading the intestines, retards the natural powers of appropriation ; just as a man may be prevented from walking by a weight which, nevertheless, he may be able to support. Give enough, but divide it into at least three meals—four or five will be better—and let the animal have them at stated periods ; taking care that it never at one time has as much as it can eat : and by degrees return to the ordinary mode of feeding.

The fainting fits create great alarm, but, if properly

treated, they are very trivial affairs. An ethereal enema, and a dose or two of the medicine, will generally restore the animal. No other physic is needed, but greater attention to the feeding is required. Excessive exercise will cause them, and the want of exercise will also bring them on. The open air is of every service, and will do more for the perfect recovery than almost anything else. When the scarf-skin peels off, a cold bath with plenty of friction, and a walk afterwards, is frequently highly beneficial; but there are dogs with which it does not agree, and, consequently, the action must be watched. Never persevere with anything that seems to be injurious. If the mange breaks out, a simple dressing as directed for that disease will remove it, no internal remedies being in such a case required.

I cannot close my account of distemper without cautioning the reader against the too long use of quinine. It is a most valuable medicine, and, as a general rule, no less safe than useful. I do not know that it can act as a poison, or destroy the life; but it can produce evils hardly less, and more difficult to cure, than those it was employed to eradicate. The most certain and most potent febrifuge, and the most active tonic, it can also induce blindness and deafness; and by the too long or too large employment of quinine a fever is induced, which hangs upon the dog, and keeps him thin for many a month. Therefore, when the more violent stages of the disease have been conquered, it should no longer be employed. Other tonics will then do quite as well, and a change of

medicine often performs that which no one, if persevered with, will accomplish.

All writers, when treating of distemper, speak of worms, and give directions for their removal during the existence of the disease. I know they are too often present, and I am afraid they too often aggravate the symptoms; but it is no easy matter to judge precisely when they do or when they do not exist. The remedies most to be depended upon for their destruction, are not such as can be beneficial to the animal laboring under this disorder; but, on the other hand, the tonic course of treatment I propose is very likely to be destructive to the worms. Therefore, rather than risk the possibility of doing harm, I rely upon the tonics, and have no reason to repent the confidence evinced in this particular.

The treatment of distemper consists in avoiding all and everything which can debilitate; it is, simply, strengthening by medicine aided by good nursing. It is neither mysterious nor complex, but is both clear and simple when once understood. It was ignorance alone which induced men to resort to filth and cruelty for the relief of that which is not difficult to cure. In animals, I am certain, kindness is ninety-nine parts of what passes for wisdom; and, in man, I do not think the proportion is much less; for how often does the mother's love preserve the life which science abandons! To dogs we may be a little experimental; and with these creatures, therefore, there is no objection to trying the effects of those gentler feelings, which the very philosophical sneer at as the in-

dications of weakness. When I am called to see a dog, if there be a lady for its nurse, I am always more certain as to the result; for the medicines I send then seem to have twice the effect.

MOUTH, TEETH, TONGUE, GULLET, ETC

THE mouth of the dog is not subject to many diseases; but it sometimes occasions misery to the animal. Much of such suffering is consequent upon the folly and thoughtlessness of people, who, having power given them over life, act as though the highest gift of God could be rendered secondary to the momentary pleasure of man. No matter in what form vitality may appear—for itself it is sacred; it has claims and rights, which it is equally idle and ridiculous to deny or to dispute. The law of the land may declare and make man to have a possession in a beast; but no act of parliament ever yet enacted has placed health and life among human property. The body may be the master's; but the spirit that supports and animates it is reserved to another. Disease and death will resent torture, and rescue the afflicted; he who undertakes the custody of an animal is morally and religiously answerable for its happiness. To make happy becomes then a duty; and to care for the welfare is an obligation. Too little is thought of this; and the fact is not yet credited. The gentleman will sport with the agony of animals; and to speak of consideration for the

brute, is regarded either as an eccentricity or an affectation. This is the case generally at the present time ; and it is strange it should be so, since Providence, from the creation of the earth, has been striving to woo and to teach us to entertain gentler sentiments. No one ever played with cruelty but he lost by the game, and still the sport is fashionable. No one ever spared or relieved the meanest creature but in his feelings he was rewarded ; and yet are there comparatively few who will seek such pleasure. Neither through our sensibilities nor our interests are we quick to learn that which Heaven itself is constantly striving to impress.

The dog is our companion, our servant, and our friend. With more than matrimonial faith does the honorable beast wed itself to man. In sickness and in health, literally does it obey, serve, love, and honor. Absolutely does it cleave only unto one, forsaking all others—for even from its own species does it separate itself, devoting its heart to man. In the very spirit and to the letter of the contract does it yield itself, accepting its life's load for better, for worse—for richer, for poorer—in sickness and in health—to love, cherish, and to obey till death. The name of the animal may be a reproach, but the affection of the dog realizes the ideal of conjugal fidelity. Nevertheless, with all its estimable qualities, it is despised, and we know not how to prize, or in what way to treat it. It is the inmate of our homes, and the associate of our leisure : and yet its requirements are not recognised, nor its necessities appreciated. Its docility and intelligence

are employed to undermine its health ; and its willingness to learn and to obey is converted into a reason for destroying its constitution. What it can do we are content to assume it was intended to perform ; and that which it will eat we are satisfied to assert was destined to be its food.

Bones, stones, and bricks, are not beneficial to dogs. The animals may be tutored to carry the two last, and impelled by hunger they will eat the first. Hard substances and heavy weights, however, when firmly grasped, of course wear the teeth ; and the organs of mastication are even more valuable to the meanest cur than to the wealthiest dame. If the mouth of the human being be toothless, the cook can be told to provide for the occasion, or the dentist will in a great measure supply the loss. But the toothless dog must eat its customary food ; and it must do this, although the last stump or remaining fang be excoriating the lips, and ulcerating the gums. The ability to crush, and the power to digest bones, is thought to be a proof that dogs were made to thrive upon such diet ; and Blaine speaks of a meal of bones as a wholesome canine dish. I beg the owners of dogs not to be led away by so unfounded an opinion. A bone to a dog is a treat, and one which should not be denied ; but it should come in only as a kind of dessert after a hearty meal. Then the creature will not strain to break and strive to swallow it ; but it will amuse itself picking off little bits, and at the same time benefit itself by cleaning its teeth. Much more ingenuity than force will be em-

ployed, and the mouth will not be injured. In a state of nature this would be the regular course. The dog when wild hunts its prey; and, having caught, proceeds to feast upon the flesh, which it tears off; this, being soft, does not severely tax the masticating members. When the stomach is filled, the skeleton may be polished; but hungry dogs never take to bones when there is a choice of meat. It is a mistaken charity which throws a bone to a starving hound.

Equally injurious to the teeth, are luxuries which disorder the digestion. High breeding likewise will render the mouth toothless at a very early age; but of all things the very worst is salivation, which, by the ignorant people who undertake to cure the diseases of these sensitive and delicate animals, is often induced though seldom recognised, and if recognised, always left to take its course.

The mouth of the dog is therefore exposed to several evils; and there are not many of these animals which retain their teeth even at the middle age. High-bred spaniels are the soonest toothless; hard or luxurious feeding rapidly makes bare the gums. Stones, bones, &c., wear down the teeth; but the stumps become sources of irritation, and often cause disease. Salivation may, according to its violence, either remove all the teeth, or discolor any that may be retained. The hale dog's teeth, if properly cared for, will generally last during the creature's life; and continue white almost to the remotest period of its existence. I have seen

very aged animals with beautiful mouths ; but such sights, for the reasons which have been pointed out, are unfortunately rare. The teeth of the dog, however, may be perfectly clean and entire even at the twelfth year ; and it is no more than folly to pretend that these organs are in any way indicative of the age of this animal. They are of no further importance to a purchaser than as signs which denote the state of the system, and show the uses to which the animal has been subjected. The primary teeth are cut sometimes as early as the third week ; but, in the same litter, one pup may not show more than the point of an incisor when it is six weeks old ; while another may display all those teeth well up. As a general rule, the permanent incisors begin to come up about the fourth month ; but I have known a dog to be ten months old, and, nevertheless, to have all the temporary teeth in its head. The deviations, consequently, are so great that no rule can be laid down ; and every person who pretends to judge of the dog's age by the teeth is either deceived himself, or practising upon the ignorance of others.

Strong pups require no attention during dentition ; but high-bred and weakly animals should be constantly watched during this period. When a tooth is loose, it should be drawn at once, and never suffered to remain a useless source of irritation. If suffered to continue in the mouth, it will ultimately become tightened ; and the food or portions of hair getting and lodging between it and the permanent teeth, will inflame the gum, and

cause the beast considerable suffering. The extraction at first is so slight an operation, that when undertaken by a person having the proper instruments, and knowing how to use them, the pup does not even vent a single cry. The temporary tusks of small dogs are very commonly retained after the permanent ones are fully up, and if not removed, will remain perhaps during the life; they become firm and fixed, the necks being united to the bone. This is more common in the upper than in the lower jaw, but I have seen it in both. Diminutive high-bred animals rarely shed the primary tusks naturally; therefore, when the incisors have been cut, and the permanent fang teeth begin to make their appearance through the gums, the temporary ones ought, as frequently as possible, to be moved backward and forward with the finger, in order to loosen them. When that is accomplished, they should be extracted, which if not done at this time will afterwards be difficult. As the tooth becomes again fixed, filth of various kinds accumulates between it and the permanent tusk; the animal feeds in pain, the gum swells and ulcerates, and sometimes the permanent tusk falls out, but the cause of the injury never naturally comes away.

To extract a temporary tusk after it has reset is somewhat difficult, and is not to be undertaken by every bungler. The gum must be deeply lanced; and a small scalpel made for the purpose answers better than the ordinary gum lancet. The instrument having been passed all round the neck of the tooth, the gum is

with the forceps to be driven or pushed away, and the hold to be taken as high as possible ; firm traction is then to be made, the hand of the operator being steadied by the thumb placed against the point of the permanent tusk. As the temporary teeth are almost as brittle as glass, and as the animal invariably moves its head about, endeavoring to escape, some care must be exercised to prevent the tooth being broken. However, if it is thoroughly set, we must not expect to draw it with the fang entire, for that has become absorbed, and the neck is united to the jawbone. The object, therefore, in such cases, is to grasp the tooth as high up as possible, and break it off so that the gum may close over any small remainder of the fang which shall be left in the mouth. The operator, therefore, makes his pull with this intention ; and when the tooth gives way, he feels, to discover if his object has been accomplished. Should any projecting portion of tooth, or little point of dislodged bone be felt, these must be removed ; and in less than a day the wound shows a disposition to heal ; but it should afterwards be inspected occasionally, in case of accidents.

When foulness of the mouth is the consequence of the system of breeding, the constitution must be invigorated by the employment of such medicines as the symptoms indicate ; and the teeth no further interfered with than may be required either for the health, ease, or cleanliness of the animal.

From age, improper food, and disease conjoined, the

dog's mouth is frequently a torture to the beast, and a nuisance to all about it. The teeth grow black from an incrustation of tartar ; the insides of the lips ulcerate ; the gums bleed at the slightest touch, and the breath stinks most intolerably. The dog will not eat, and sometimes is afraid even to drink ; the throat is sore, and saliva dribbles from the mouth ; the animal loses flesh, and is a picture of misery.

When such is the case, the cure must be undertaken with all regard to the dog's condition ; harm only will follow brutality or haste. The animal must be humored, and the business must be got through little by little. In some very bad cases of this description I have had no less than three visits before my patient was entirely cleansed. At the first sitting I examine the mouth, and with a small probe seek for every remnant of a stump, trying the firmness of every remaining tooth. All that are quite loose are extracted first, and then the stumps are drawn, the gums being lanced where it is necessary. This over, I employ a weak solution of the chloride of zinc—a grain to an ounce of sweetened water—as a lotion, and send the dog home, ordering the mouth, gums, teeth, and lips to be well washed with it, at least three times in the course of a day. In four days the animal is brought to me again, and then I scale the teeth with instruments similar to those employed by the human dentist, only of a small size. The dog resists this operation more stoutly than it generally does the extraction, and patience is imperative. The operation will be the more quickly got over by taking time, and exerting firmness without

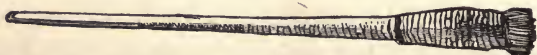
severity. A loud word or a box on the ear may on some occasions be required ; but on no account should a blow be given, or anything done to provoke the anger of the animal. The mistress or master should never be present ; for the cunning brute will take advantage of their fondness, and sham so artfully that it will be useless to attempt to proceed.

I usually have no assistance, but carry the dog into a room by itself ; and having spoken to it, or taken such little liberties as denote my authority, I commence the more serious part of the business. Amidst remonstrance and expostulation, caresses and scolding, the work then is got over ; but seldom so thoroughly that a little further attention is not needed, which is given on the following day.

The incrustation on the dog's teeth, more especially on the fangs, is often very thick. It is best removed by getting the instrument between the substance and the gum ; then with a kind of wrenching action snapping it away, when frequently it will shell off in large flakes ; the remaining portions should be scraped, and the tooth should afterwards look white, or nearly so. The instrument may be used without any fear of injuring the enamel, which is so hard that steel can make no impression on it ; but there is always danger of hurting the gums, and as the resistance of the dog increases this, the practitioner must exert himself to guard against it. Some precaution also will be necessary to thwart occasional attempts to bite ; but a little practice will give all the needful protection, and those who are not accustomed to such operations

will best save themselves by not hitting the dog ; for the teeth are almost certain to mark the hand that strikes. Firmness will gain submission ; cruelty will only get up a quarrel, in which the dog will conquer, and the man, even if he prove victorious, can win nothing. He who is cleaning canine teeth must not expect to earn the love of his patient ; the liberty taken is so great that it is never afterwards pardoned. I scarcely ever yet have known the dog to which I was not subsequently an object of dread and hatred. Grateful and intelligent as these creatures are, I have not found one simple or noble-minded enough to appreciate a dentist.

The only direction I have to add to the above, concerns the means necessary to guard against a relapse, and to afford general relief to the constitution. To effect the first object, prepare a weak solution of chloride of zinc—one grain to the ounce—and flavor the liquid with oil of aniseed. This give to your employer, together with a small stencilling, or poonah painting brush, which is a stiff



brush used in certain mechanical pursuits of art ; desire him to saturate the brush in the liquid, and with it to clean the dog's teeth every morning ; which, if done as directed, will prevent fresh tartar accumulating, and in time remove any portion that may have escaped the eye of the operator, sweetening the animal's breath. With regard to that medicine the constitution may require, it

is impossible to say what the different kinds of dogs affected may necessitate—none can be named here ; the symptoms must be observed, and according to these should be the treatment ; which must be studied from the principles inculcated throughout this work. Most usually, however, tonics, stimulants, and alteratives will be required, and their operation will be gratifying. The dog, which before was offensive and miserable, may speedily become comfortable and happy ; and should the errors which induced its misfortune be afterwards avoided, it may continue to enjoy its brief life up to the latest moment ; therefore the teeth should never be neglected ; but if any further reason be required to enforce the necessity of attending to the mouth, surely it might be found in the frightful disease to which it is occasionally subject.

When the teeth, either by decay or from excessive wear, have been reduced to mere stumps, their vitality often is lost. They then act as foreign bodies, and inflame the parts adjacent to them. Should that inflammation not be attended to, it extends, first involving the bones of the lower jaw, and afterwards the gums, and **CANKER OF THE MOUTH** is established.

Such is the course of the disease, the symptoms of which are redness and swelling during the commencement. Suppuration from time to time appears ; but as the animal with its tongue removes the pus, this last effect may not be observed. The enlargement increases, till at last a hard body seems to be formed on the jaw, immediately beneath the skin. The surface of the gums may be ten-

der, and bleed on being touched, but the tumor itself is not painful when it first appears, and throughout its course is not highly sensitive. At length it discharges a thin fluid, which is sometimes mingled with pus, and generally with more or less blood. The stench which ultimately is given off becomes powerful; and a mass of proud flesh grows upon the part, while sinuses form in various directions. Hemorrhage now is frequent and profuse, and we have to deal with a cancerous affection, which probably it may not be in our power to alleviate. The dog, which does not appear to suffer, by its actions encourages the belief that it endures no acute pain—and for a length of time maintains its condition; but, in the end, the flesh wastes and the strength gives way; the sore enlarges, and the animal may die of any disease to which its state predisposes it to be attacked.

The treatment consists in searching for any stump or portion of tooth that may be retained. All such must be extracted, and also all the molars on the diseased side, without any regard to the few which may be left in the jaw. This done, the constitution must be strengthened, and pills, as directed, with the liquor arsenicalis, should be employed for that purpose.

Iodide of iron	One to four grains.
Powdered nux vomica .	A quarter of a grain to one grain.
Salicine	One to four grains.
Extract of gentian . .	Three to twelve grains.
Powdered quassia . .	As much as may be required.

The above forms one pill, three or four of which should

be given daily, with any other medicine which the case may require.

To the part itself a weak solution of the chloride of zinc may be used; but nothing further should be done until the system has been invigorated, and the health, as far as possible, restored. That being accomplished, if the tumor is still perfect, it should be cut down upon and removed. If any part of the bone is diseased, so much should be taken away as will leave a healthy surface.

However, before the dog is brought to the veterinary surgeon for treatment, very often the tumor has lost its integrity, and there is a running sore to be healed. To this probably some ignorant persons have been applying caustics and erodents, which have done much harm, and caused it to increase. In such a case we strengthen the constitution by all possible means, and to the part order fomentations of a decoction of poppy-heads, containing chloride of zinc in minute quantities. Other anodyne applications may also be employed; the object being to allay any existing irritation, for the chloride is merely added to correct the feter, which at this period is never absent. After some days we strive to ascertain what action the internal remedies have had upon the cancer; for by this circumstance the surgeon will decide whether he is justified in hazarding an operation. If the health has improved, but simultaneously the affected part has become worse, then the inference is unfavorable; for the disease is no longer to be regarded as local. The consti-

tution is involved, and an operation would produce no benefit, but hasten the death, while it added to the suffering of the beast. The growth would be reproduced, and its effects would be more violent; consequently nothing further can be done beyond supporting the system, and alleviating any torture the animal may endure. But if the body has improved, and the tumor has remained stationary, or is suspected to be a little better, the knife may be resorted to; although the chance of cure is rather against success. The age of the animal, and the predisposition to throw out tumors of this nature, are against the result; for too frequently, after the jaw has healed, some distant part is attacked with a disease of a similar character.

WORMING, as it is generally called, is often practised upon dogs, and both Blaine and Youatt give directions for its performance. I shall not follow their examples. It is a needless, and therefore a cruel operation; and though often requested to do so, I never will worm a dog. Several persons, some high in rank, have been offended by my refusal; but my profession has obligations which may not be infringed for the gratification of individuals. People who talk of a worm in the tongue of a dog, only show their ignorance, and by requesting it should be removed, expose their want of feeling.

Pups, when about half-grown, are sometimes seized with an inclination to destroy all kinds of property. Ladies are often vexed by discovering the havoc which their little favorites have made with articles of millinery;

gloves, shawls, and bonnets, are pulled to pieces with a seeming zest for mischief, and the culprit is found wagging its tail for joy among the wreck it has occasioned. Great distress is created by this propensity, and a means to check it is naturally sought for. Mangling the tongue will not have the desired effect. For a few days pain may make the animal disinclined to use its mouth ; but when this ceases, the teeth will be employed as ingeniously as before. Some good is accomplished by clipping the temporary fangs : these are very brittle, and easily cut through. The excision causes no pain, but the point being gone, the dog's pleasure is destroyed ; and, as these teeth will naturally be soon shed, no injury of any consequence is inflicted. By such a simple measure, more benefit than worming ever produced is secured ; for in the last case, almost in every instance, the obnoxious habit entirely ceases.

As to worming being of any, even the slightest, protection, in case rabies should attack the dog, the idea is so preposterous, that I shall not here stay to notice it.

The tongue of the high-bred spaniel is often subject to partial paralysis of one side. When such is the case, the muscles of the healthy side draw the tongue in that direction ; and the member hangs out of the mouth, rendering the appearance somewhat unsightly. The organ from exposure becomes dry and hard ; and not being properly used to cleanse the nose, this last becomes harsh and encrusted upon such portion of its surface as the disabled tongue cannot reach. The dog is disfigured,

but it manages to live, and seems to endure more inconvenience than positive pain. The muscles on the paralysed side do not appear to be entirely deprived of nervous power. I infer this to be the case because they do not waste, and therefore attribute the affection to loss of tone rather than to actual palsy.

The cause is not known. Some dogs are pupped in this condition; others are only affected in this way when age has far advanced. In the latter case the symptom is sudden, and nothing previous has been observed which would denote the probability of the attack; but, arguing from the description of animals which are subject to this affection, and the periods when it mostly is exhibited, we may attribute it to weakness of the constitution.

For the disease nothing of a local nature can be done. I have been induced to try various topical remedies, but not with any satisfactory result; and I am not very hopeful as to future experiments in the same direction. Constitutional remedies have more power; and by these, if we cannot cure, we may limit the evil. For pups, good nursing—not petting or pampering, but whatever can invigorate—wholesome diet, airy lodging, and sufficient exercise, will do much. For older animals, the same measures, combined with such medicines as correct the digestion and give tone to the system, will be proper. An operation of dividing the muscles of that side on which the tongue protruded was once successful; but on three subsequent occasions it failed, and I have therefore relinquished it; for it is not quite safe, and puts the ani-

mal to a great deal of suffering. Dog fanciers sometimes cut off the exposed portion of the tongue, and thereby conceal the defect; but this is a brutal custom, and should not be adopted. The animal so mutilated drinks with difficulty, and the nose ultimately becomes even more unsightly than was the appearance of the hanging tongue.

The tongue is sometimes injured by the teeth, especially during fits. In such cases the wounds generally heal quickly, and require no special attention. Should the sores not mend, the fault is in the system. To that, and not to the part, medicines should be directed, and the matter will be quickly settled.

Salivation should never be produced upon the dog. The largest and strongest of these animals can but ill sustain the constitutional effects of mercury; while to those of a delicate kind it is nearly certain death. It may be induced by inunction, or rubbing in of ointment, as surely as by calomel internally administered. Chemists mix up various ointments that are called black, blue, red, white, or yellow; and sell these as specifics for skin diseases, which are in the dog all denominated mange. Such things are applied to the entire surface of the body; and as they mostly contain either Turpeth or Ethiop's mineral calomel, or one of the preparations of mercury, no great time is required to produce their fullest effect. The operation of the metal is too frequently mistaken for an aggravation of the disorder; and when the chemist is next visited, he is told to make the stuff stronger, because the other made the dog worse. No warning nature

can give will stop the proceeding. Night and day the dog is rubbed with the poison, till its gums are sore, or its teeth fall out ; the saliva dribbles from the mouth ; the glands enlarge, the dog refusing to eat, and is so weak that it can hardly stand ; then, fearing death, a doubt is for the first time entertained, and a veterinary surgeon is requested to look at the animal, and say what it wants.

Chemists are not qualified to administer the drugs they sell to human beings ; but they are fairly the murderers of a fourth part of the dogs they physic. They know nothing about these animals, and dispense poison under the name of medicine when they presume to treat them. I have had creatures brought to me in the most terrible condition ; and when they have been under domestic treatment—that is, when the chemist has been consulted—I always look to find symptoms of salivation. The signs are not obscure ; the gums are either soft, tender, and inflamed, or else very much retracted ; the teeth are of a yellow or brownish color, loose and mottled on their surfaces, but not covered with tartar ; the breath has a peculiar feter, and the saliva flows from the lips, while the glands at the jaw are hard ; the weakness is excessive, and the appearance dejected. Purgation may be present, and in some instances the whole of the hair has fallen off. One dog, a Scotch terrier, lost every portion of its coat, and was nearly a year before it regained the covering.

Here is a portrait of a Scotch terrier, and the reader will perceive the coat is by the artist truthfully depicted as remarkably long, full, and hairy.



The imagination can, from this likeness of the animal in health, conjure up the resemblance such an object as the poor dog must have presented without its coat. Nor was the loss of the hair the worst part of the business ; it never afterwards grew to its proper length. The other symptoms which have been described were present. Fever also existed, though the debility in a great measure concealed it ; nor was the issue of the case by any means certain for a week or even longer.

The health may be restored, but the teeth will never regain their whiteness, nor the breath recover its natural odor. A mild acidulated drink, made of sulphuric acid and sweetened water, will be the most proper remedy. It should be made pleasant, and tasted before given to the dog, which will prevent its being administered of too great a potency. Of this as much as can be conveniently got down may be given, from a quarter of a pint to a quart daily ; and with it the sulphate of iron, the disulphate of quinine, and vegetable bitters, made into pills,

may be joined. If the bowels are costive, injections of the sulphate of magnesia, or small doses of the salt, may be employed, while the food should be nourishing. Sulphuric acid and the sulphates, with generous diet, will constitute the treatment; and if the case be not too far advanced, these will ultimately restore the strength.

BRONCHOCELE.

THIS disease is usually seen in greatest severity in pups. It consists in an enlargement of the thyroid body, which increases so much as to destroy the life. In old dogs it is commonly stationary, or of a fixed size. Spaniels and terriers are much exposed to it; and of the last-mentioned breed, probably bull-terriers are, of all animals, the most liable to be attacked.

In pups, the thyroid body greatly and quickly enlarges, so as to cut short the life by when the sixth week is attained. The disease of itself, in old dogs, is rather annoying than fatal; but the manner in which it destroys the animal when very young, is by impeding the circulation and respiration. The enlarged thyroid body presses upon the trachea and jugular veins. The blood which should return from the brain and head is thereby prevented descending, and hindered from reaching the heart in a full current. The vessels enlarge so as to become obvious to the most indifferent observer. The veins not only look swelled, but they feel turgid, and cannot be

compressed ; the little beast is dull ; the breathing is very laborious ; the animal sleeps much, and at last dies without a struggle, casting off life as it were but a troubled dream. It never has perfectly enjoyed existence, and its departure is not to be regretted.

With the older animals, so far as my experience at present teaches me, the thyroid body, when enlarged, has not suddenly increased ; yet this fact by no means proves that the diseased part is always quiescent, and cannot increase in size. Because of this possibility, and the safety of the process, the disease should be eradicated. This is to be done by administering iodine by the mouth, and painting over the enlargement (having the hair first closely shaved off the part) with some of the tincture of the same drug, applied by means of a camel's hair brush. As iodine soon separates and is thrown down to the bottom, all the preparations of it should be used as freshly made as may be convenient. The mixture of which iodine is the active ingredient, and which is a week old, may be confidently said to have lost the major part of its virtue. Every three or four days this medicine should be concocted ; for even when put into pills, iodine, being very volatile, will evaporate. The quantity to be given to the dog varies, from a quarter of a grain four times a day to the smallest pup, to two grains four times daily to the largest dog. The tincture used for painting the throat is made with spirits of wine, an ounce ; iodide of potassium, a drachm.

RESPIRATORY ORGANS.

THE LARYNX of the dog is affected in various ways. It is called a "little box," and the projecting part of this organ is, in the throat of man, spoken of as "Adam's apple." It opens at the back part of the mouth, and is placed at the beginning of the windpipe. All the air that inflates the lungs must pass through it, but it will permit nothing else to enter with impunity. A drop of saliva, or the smallest particle of salt, will be sufficient to call forth the most painful irritability. In fact the lining membrane of the larynx is the most tender or sensitive structure in the body; and, as parts are exposed to suffering just in proportion as they are endowed with sensation, of course, the organ so finely gifted is often the seat of disease.

The dog's larynx has many peculiarities. It is very complicated, and exquisitely constructed. Few persons have, perhaps, much attended to the notes of the animal's voice; but those who will observe the sounds may find these take a range far more wide than is generally imagined. The dog's voice is remarkably expressive, and to my ear speaks very intelligible music. The deep growl is not without variety; for by the feeling of the animal that emits it the note is always modulated. The rumble of expostulation the favorite gives utterance to when the master pretends to take away its bone does not resemble the rattle of joy with which the child's playmate accom-

panies a game of romps. Both, however, are distinct from the suppressed warning with which the watchdog announces the advancing stranger, or the sharp defiance by which he signifies his determination to attack. The bark also is not by any means monotonous, but is capable of infinite variety. The cries of the animal are remarkably modulated ; but the soft and gentle sounds it can emit when inclined to coax its master, or answering to the excess of pleasure which his caresses create, are full of natural music. The dog's voice is not to my ear less beautiful than the song of a bird ; but more delightful, because it is more full of meaning. The nightingale has but one song, which it constantly repeats. The cur has many tuneful notes, with which it responds to my attentions. Music has been recognised in the tongues of the pack, but I have heard harmony more delightful from the hound in my home. I like to hear the dog's voice, especially when not too loud, and having studied it, I have often wondered the animal did not speak. There can be little doubt it would be able to frame words if it possessed the power to comprehend their meaning ; but the high intelligence of the creature unfits it for parrot-like mimicry. The dog is, in all it does, guided by its reason, and it performs no act without a reasonable motive. If any physical incapacity exist, it is to be found rather in the formation of the mouth than in the construction of the larynx, which presents no explanation of the dog's inability to frame definite sounds like words.

The part is rarely the seat of acute disease. In rabies,

especially of the dumb kind, it is acutely affected ; but of that form of disorder the writer will have to speak in another place. Of acute laryngitis, as met with commonly in the horse, I have not seen an example in the dog, and therefore I shall not here say anything about it. Of chronic disease of the larynx there is no lack of instances. These are brought to us frequently, and generally are submitted to our notice as cases of continued or confirmed cough. Cough, however, is but a symptom; and may be no more than a sympathetic effect induced by the derangement of a distant structure. When it is caused by the condition of the larynx, it has a deep sound, which is never entirely changed in character, however much pain induces the animal to suppress it. It is essentially the same in every stage, though it may be more or less full or loud, according to the state of the air passage.

This cough may start up from sympathy ; but then it is always less sonorous, harsh, and grating. It is also less spasmodic, and likewise less the consequence of particular causes. When the larynx is the seat of the affection, the cough, should it once begin, continues for a considerable time ; and cold air or excitement will invariably induce it. In bad cases every act of inspiration is followed by a kind of noise intermediate between a grunt and a cough. Sometimes the breathing is accompanied by a species of roaring ; and I have seen one case in which a blood-hound had every symptom of laryngismus stridulus, or the crowing disease of the human infant.

Laryngeal disorders are seldom brought under our notice until they are confirmed, and they are difficult to cure in proportion to the length of time they have existed. The food in every case must be rigidly regulated, and no solid flesh should be allowed; but if the animal be very old or weak, beef tea or gravy may be added to the rice or biscuit which constitutes the chief portion of the diet. The condition of the stomach must so far as possible be ascertained, and the medicines necessary to correct its disease should be administered. The exercise must not be stinted, neither should confinement within doors be insisted upon. All must be done to assist the digestion and invigorate the health; such precautions being adopted as prevent the aggravation of the disease. Sudden changes of atmosphere, as from a warm room to a frosty air during the depth of winter, should obviously be avoided; neither would it be prudent to race the animal about, or induce it to perform any action calculated to accelerate the breathing.

At the commencement a gentle emetic given every other morning until six or seven have been administered, with a laxative occasionally if the bowels are torpid, is often productive of speedy benefit. A mustard poultice to the throat is also to be recommended, but he who applies it must be attentive to remove it when it appears to seriously pain the animal. It may be repeated on each successive night, or even oftener, but should never be reapplied before the skin on which it was previously placed has ceased to be tender. Leeches to the throat

are often of service, as also are small blisters to the chest. I found great improvement result from wearing a very wide bandage, which was kept wet, and covered with oil silk, round the neck. This is easily made, and strips of gutta percha, or stout leather, will prevent it being doubled up by the motions of the head ; and it is scarcely a disfigurement, since it only looks like a large collar. A seton in the throat may be tried, but though often beneficial, it ought only to be inserted by a person acquainted with the anatomy of the dog ; for the jugular veins in this animal are connected by several large branches, which run just where the seton would be introduced. These could not be pierced with impunity, nor ought the seton to be left in so long as might induce sloughing, when the vessels probably would be opened ; for as the dog badly sustains the loss of blood, the result would surely be fatal.

Internal medicines are not to be neglected. All sedatives, balsams, expectorants, and peppers, with some alkalies and stimulants, may be tried, and even alterative doses of mercury with caution resorted to. Dogs are more peculiar with respect to the medicines that act upon individuals than any other animals I am acquainted with. That which touches one will be inoperative upon another ; and what violently affects one, will on a second, apparently of the same bulk, strength, age, and character, be actually powerless. This renders dog-practice so difficult, and makes the explanation of any decided mode of treatment almost impossible. A great deal must necessarily be left to the discretion of the practitioner, who, despite his

utmost care, will often have reason for regret, if he do not in every new instance proceed with caution. The following pills are likely to do good :—

Barbadoes tar	Half a drachm to two drachms.
Powdered squills	A drachm to four drachms.
Extract of belladonna . .	Half a scruple to four scruples.
Liquorice powder	A sufficiency.

Beat into a mass, and make into twenty pills ; give four daily. Or,

James's powder	One grain to four grains.
Dover's powder	Six grains to a scruple.
Balsam of Peru	A sufficiency.

Make into one pill and give as before. Or,

Extract of hyoscyamus . .	One to four grains.
Powdered ammoniacum, } and cubebs, of each . . }	Four to twelve grains.
Venice turpentine	
	A sufficiency.

Powdered capsicums and cantharides have also seemed to touch the disease ; but no one medicine has to me appeared to have any specific influence over it. In these cases mere formulæ could be extended almost indefinitely ; but the reason must be exerted, and the prescription must be dictated by the symptoms. Thus, when there is much nervous excitability accompanied with gastric derangement, Prussic acid of Scheele's strength, in doses of half a drop to two drops, may be exhibited ; and if the mouth be dry, and the disposition irritable, from five to twenty

drops of the tincture of Indian tobacco may be administered. If the throat is very sore, the mouth may be held open, and ten grains of powdered alum mixed with four times its weight of fine sugar may be blown into it, or in severe instances, the fauces may be mopped out by means of a piece of soft sponge tied to the end of a probe, and saturated with a solution containing six grains of nitrate of silver dissolved in an ounce of water.

Ulceration of the interior of the larynx is to be dreaded if the symptoms do not yield. This will be denoted by the cough becoming weaker, less loud, more short, and also more frequent. Prior to it there are always intervals during which the animal enjoys repose ; but after ulceration of the larynx is established every inhalation provokes the irritability of the organ. With it the constitutional symptoms become more serious, and little can then by medicine be accomplished ; for the passage of the air which is necessary to life causes the affection we desire to cure to spread. Tracheotomy might be performed, though the dog is so very expert with its claws, and any tape around the neck would be probably so injurious, that hitherto I have not ventured to hazard the experiment. Humanity has, in such cases, forced me to recommend the destruction of the life which I entertained no hope of comforting.

Cough is much more frequently a symptom than a disease. It, in fat dogs, usually proceeds from disordered digestion ; and then to remove it the cause must be attacked. It accompanies worms ; and if these are

expelled, it will subside. It may, however, exist by itself, for the larynx of the dog early becomes ossified or converted into bone ; and being then less yielding, the violent vibrations it is subjected to during the act of barking have a natural tendency to injure the delicate lining membrane. Its irritability is excited, and cough is the consequence. The disposition of the creature to give tongue ought, therefore, to be as much as possible checked, and a mustard poultice applied to the throat, while the pills first recommended on page 205, are given ; but if these fail, the others may be employed. The general measures would be pretty much the same, only the more severe need not be resorted to. Quiet, mild food, and a little care, will often, without medicine, remove the annoyance ; but it is never well to trust too long to such dubious aids, when timely assistance will procure speedy relief, and delay may lead to further evil.

SNORING is often a heavy accusation brought against the dog. It may proceed from weakness ; though, in ninety-nine cases out of every hundred, it results from that debility which accompanies accumulated fat and sloth. In the one case we apply the means advised to restore the strength,—in the other, we stint the food, enforce a vegetable diet, and see that sufficient exercise be taken.

SNORTING is another unpleasantness which the canine race display. The animals stand with their heads erect, and, drawing the air through the nostrils, produce a series of harsh loud sounds, which are sometimes continued till

the dog falls from actual exhaustion. This is the result of irritability, in a low form, of the lining membrane of the nasal chambers. The sensation is probably that of itching, and the dog endeavors, by drawing the air quickly through the nostrils and energetically expelling it, to relieve the annoyance.

The treatment is not to be laid down ; attention to the food, and medicines of an alterative nature calculated to affect or improve the secretions, are most likely to be of service. Worms may possibly be the provocative, and in that case of course they should be removed. The measures, therefore, are not to be arbitrarily pointed out. The judgment must be employed to discover in what particular the system is unsound, and the agents used must be selected with a view to the general health. Local applications have been tried without advantage, but there do not appear to be any specifics for the complaint. The snorting is to be regarded merely as an effect of some deep-seated derangement, and the remedies are to be such as the appearance of the animal suggests. I have generally been successful in these cases, but I remember no two of them which I have treated exactly in the same manner. Patience and perseverance are mostly required, but sometimes the affection will not yield to any remedy. When it appears to be obstinate, the use of medicine should not be pushed too far. The constitution of the dog is so easily injured, and with so much difficulty restored, that where a mere unpleasantness is apparently all that exists, it is better to permit that to continue than hazard

the health of the animal by over-strenuous attempts to get rid of it.

COLD or CORIZA is not frequent in the dog, but it will occasionally be seen. It comes on gradually, and often passes off without any assistance being given. In pups it is apt to pass first into bronchitis, and then change into distemper, which in such instances, spite of our best endeavors, will often terminate in fits.

It springs from various causes, but neglect and improper lodging are generally those to which it may be traced. In adult animals it is not to be greatly feared, but in the young it requires immediate attention. The kennel must be looked to ; the food and exercise be strictly watched. Tonics, into which cayenne pepper, cubebs, or balsam of pepper enter, are to be tried, and cod-liver oil also is worth an experiment. The iodide of potassium is also not to be rejected ; but the condition of the patient must decide which is the most likely to be of service in the case. When undertaken early, the symptoms yield in the majority of instances. The discharge, which at the commencement is thin, becomes more copious, grows thicker, and at last ceases. The sneezing stops and the spirits return ; but should the disorder not be checked, the larynx becomes involved, and cough appears. If no relief be now sought, and the disease spreads, the breathing grows quick at first, and then laborious.

The pup may even at this stage be eager to feed, and when its attention is excited, be as playful as in health ; but if watched it will be seen, when alone, to be oppressed

and languid. In such cases, belladonna, combined with James's powder, an equal amount of each, should be administered. The dose should be exhibited every hour, for here the wish is to obtain the speedy effect of the drug without allowing its sedative property to seriously affect the strength. To a young pup, a quarter of a grain will be the proper quantity ; and for a full-grown large-sized dog, two grains of the extract may be employed. The action, however, must be observed, and when a marked disinclination for food or drink, with a seeming wish for both, and signs of inconvenience in the throat are seen, the belladonna must be withheld. On the third day, if the cure be not complete, it may be a second time employed ; and, after a like period, even a further trial may be made. At the same time, a little soap liniment may be rubbed into the throat, along the course of the windpipe, and over the chest. The bowels also should be regulated ; but purgation is not to be desired. Should the liver be sluggish, mild alterative doses of the grey powder may be sprinkled upon the food, and will thus be taken without the necessity of forcing the animal. When the measures recommended do not succeed, the appearance of the patient must direct those which are next to be adopted. Where weakness prevails, and shivering denotes the presence of fever, quinine and the sulphate of iron are required. Small blisters, or mustard poultices, to the chest, may with due caution be applied. An emetic may even be administered ; but, if repeated at all, it must be only after two or three days

have elapsed. Where the system is vigorous, expectorants and sedatives, with leeches to the chest, may be used. Turpentine liniment to the sides, throat, and under the jaws, may also be freely rubbed in, and the diet in quantity restricted. Tartar emetic in very minute doses may be exhibited three times daily.



INFLAMMATION OF THE LUNGS.

The chest of the dog is not in any remarkable degree the seat of disease. The ribs of the animal being constructed for easy motion, and the muscles which move them being strong and large in proportion to the size of the bones, the lungs, therefore, are in general properly expanded; and this circumstance tends to preserve them in a healthy condition. They do not, however, always escape, but are subject to the same inflammations as those of the horse, though, from the causes stated, more rarely attacked.

INFLAMMATION OF THE LUNGS is denoted by a quickened pulse and breathing, preceded by shivering fits. The appetite does not always fail; in one or two instances I have seen it increased; but it is most often

diminished. The animal is averse to motion ; but when the affection is established, the dog sits upon its hocks, and wherever it is placed, speedily assumes that position. As the disorder becomes worse, the difficulty of breathing is more marked. The creature also shows a disposition to quit the house, and if there be an open window it will thrust its head through the aperture. The sense of suffocation is obviously present, and at length this becomes more and more obvious. The dog in the very last stage refuses to sit, but obstinately stands. One of the legs swells, and, on being felt, it is ascertained to be enlarged by fluid. There is dropsy of the chest, and the limb has sympathized in the disposition to effusion. The pulse denotes the weakness of the body ; but the excitement of disease in a great measure disguises the other symptoms. The dog may even, to an unpractised eye, seem to possess considerable strength ; for it resists, with all its remaining power, any attempt to move it, and its last energies are exerted to support the attitude that affords the most relief to the respiration. At length the poor brute stubbornly stands until forced to stir, when it drops suddenly, and for several moments lies as if the life had departed. Again it falls, but again revives ; and always with the return of consciousness gets upon its legs ; but at last it sinks, and without a struggle dies.

The lungs have been, in the first instance, inflamed, but the pleura or membrane covering the lungs, and also lining the chest, has likewise become by the progress of the disease involved. The cavity has become

full of water, or rather serum, and by the pressure of the fluid the organs of respiration are compressed. It is seldom that both sides are gorged to an equal degree ; but one cavity may be quite full while the other is only partially so. One lung, therefore, in part remains to perform the function on which the continuance of life depends ; and if, by any movement, the weight of fluid is brought to bear upon the little left to continue respiration, the animal is literally asphyxiated. It drops, in fact, strangled, or more correctly, suffocated ; and as the vital energy is strong or weak, so may the dog more or less frequently recover for a time. In the end, however, the tax upon the strength exhausts the power, and the accumulation of the fluid diminishes the source by which the life was sustained. After death, I have taken from the body of a full-sized Newfoundland one lung, which lay with ease upon my extended hand ; while the two held together afforded a surface sufficient to support the other. The condensation was so great that the part was literally consolidated, and the fluid which exuded on cutting into the substance was small in quantity. The blood-vessels were, with the air-cells, compressed, and while the arterialization of the blood was imperfect, the circulation was also impeded.

The causes usually assigned to account for inflammation of the lungs will not, in the dog, explain its origin. I have usually met it where the animal had not been exposed to wet or cold ; where it had not undergone excessive exertion, or been subjected to violence. Extraordinary care

has rather seemed to induce, than the neglect of the creature appeared to provoke the attack. It is, however, easy to trace causes when we have a wish to explain a particular effect ; but where the lungs have been inflamed I have never, to my entire satisfaction, been able to ascertain that the animal had been exposed to hardship, or subjected to labor which it had not previously sustained, and which, if the health had been good, it might not have endured.

Disease of the lungs is, in the early stage, very readily subdued ; but, if allowed to establish itself, it is rarely that medicine can eradicate it. The majority of persons who profess to know anything about the diseases of dogs, look upon the nose as an indication of the health. While the appetite is good, or the nose is cold and moist, such people are confident no fear need be entertained. Of the uncertainty that attends the disposition to feed mention has been already made ; but with regard to the condition of a part, the persons who assume to teach us are likely to be in such cases entirely deceived. I have known dogs with violent inflammation of the lungs ; I have seen them die from dropsy of the chest ; and their noses have been wet and cold, even as though the animals had iced the organs. From this mistaken notion, therefore, no doubt, are to be traced the numerous instances of dogs brought for treatment when no remedies can be of avail. They are submitted to our notice only that we may be pained to look upon their deaths ; and often have my endeavors been thus limited to simple palliative measures, when an

earlier application would have enabled me to employ medicine with a reasonable prospect of success.

In the commencement, when the breathing is simply increased and the pulse slightly accelerated, then if you place the ear to the side, there is merely a small increase of sound; and the animal exhibits no obstinate, or more properly, unconquerable disposition to sit upon the hocks; small quantities of belladonna, combined with James's powder, will generally put an end to the disease. The belladonna, in doses of from one to four grains, may be given three times a day; but where trouble is not objected to, and regularity can be depended upon, I prefer administering it in doses of a quarter of a grain to a grain every hour. By the last practice I think I have obtained results more satisfactory; but it is not always that a plan necessitating almost constant attention can be enforced, or that the animal to be treated will allow of such repeated interference. The following formula will serve the purpose, and the reader can divide it if the method I recommend can be pursued.

Extract of belladonna	. .	One to four grains.
James's powder	. . .	Two to eight grains.
Nitrate of potash	. . .	Four to sixteen grains.
Extract of gentian	. .	A sufficiency for one pill.

If, on the second day, no marked improvement is perceptible, small doses of antimonial wine may be tried; from fifteen minims to half-a-drachm may be given every fourth hour, unless vomiting be speedily induced; when the next dose must, at the stated period, be reduced five or ten

minims, and even further diminished if the lessened quantity should have an emetic effect. The object in giving the antimonial wine is to create nausea, and not to excite sickness ; and we endeavor to keep up the action in order to affect the system. This is frequently very decisive in the reduction of the symptoms ; but, even after the danger has been dispelled, the pills before recommended must be persevered with, and every means adopted to prevent a relapse.

Sometimes, however, the disorder commences with a violence that, from the very beginning of the attack, calls for the most energetic measures. If the breathing be very quick, short, and catching; the position constant; the pulse full and strong; the jugular vein may be opened, and from one ounce to eight ounces of blood extracted ; or leeches may be applied to the sides ; or an ammonia-cal blister may be employed. This is done by saturating a piece of rag, folded three or four times, with a solution composed of liquor ammoniac fort., one part ; distilled water, three parts ; and, having placed it upon the place from which the hair has been previously cut off, holding over it a dry cloth to prevent evaporation of the volatile vesicant. A quarter of an hour will serve to raise the cuticle ; but frequently that object is accomplished in less time ; therefore, during its operation, the agent must be watched, or else the effect may be greater than we desire, and sloughing may ensue.

A dose of castor oil may also be administered, and the food should be composed entirely of vegetables, if the

animal can be induced to eat this kind of diet. Exertion should be prevented, and quiet as much as possible enjoined. The tincture of aconite, it is said, sometimes does wonders in inflammation of the lungs ; but in my hands its operation has been uncertain, though the homœopathists trust greatly to its action in this disease. They give it singly, but I have not reaped from its use on the dog those advantages which tempt me to depend solely on its influence. When employed, it may be given in doses of from half a drop to two drops of the tincture, in any pleasant vehicle, every hour.

After dropsy of the chest has been established, the chance of cure is certainly remote ; but tapping at all events renders the last moments of life more easy. It is both simple and safe, and does not seem to occasion any pain ; but, on the contrary, to afford immediate relief. The skin should be first punctured, and then drawn forward so as to bring the incision over the spot where the instrument is to be inserted. The place where the trocar should be introduced is between the seventh and eighth ribs, nearer to the last than to the first, and rather close to the breast-bone. The point being selected, the instrument is pushed gently into the flesh ; and when the operator feels no resistance is offered to the progress of the tube, he knows the cavity has been pierced. The stilet is then withdrawn, and the fluid will pour forth. Unless the dog shows signs of faintness, as much of the water as possible ought to be taken away ; but if symptoms of syncope appear, the operation must be stopped,

and after a little time, when the strength has been regained, resumed. When this has been done, tonics must be freely resorted to. The following pill may be administered three or four times a day; and the diet should be confined to flesh, for everything depends on the invigoration of the body, and the inflammation is either gone, or it has become of secondary importance.

Iodide of iron	One to four grains.
Sulphate of iron	Two to eight grains.
Extract of gentian . . .	Ten grains to half a drachm.
Powdered capsicums . .	Two to eight grains.
Powdered quassia . . .	A sufficiency.

The above will make two pills; and it is better to make these the more frequently, as they speedily harden, and we now desire their quickest effect, which is sooner obtained if they are soft or recently compounded.

During recovery the food must be mild, and tonics must be administered. Exercise should be allowed with the greatest caution, and all excitement ought to be avoided. The dog must be watched and nursed, being provided with a sheltered lodging and an ample bed in a situation perfectly protected from winds or draughts, but at the same time cool and airy.

ASTHMA is a frequent disease in old and petted dogs. It comes on by fits, and, through the severity of the attack, often seems to threaten suffocation; but I have not known a single case in which it has proved fatal. The cause is generally attributable to inordinate feeding, for the



. ASTHMA.

animals thus afflicted are always gross and fat. The disorder comes on gradually in most instances, though the fit is usually sudden. The appetite is not affected, or rather it is increased often to an extraordinary degree. The craving is great, and flesh is always preferred, while sweet and seasoned articles are much relished. On examination, the signs denoting the digestion to be deranged will be discovered. Piles are nearly constantly met with; the coat is generally in a bad condition, and the hair off in places. The nose may be dry; the membrane of the eyes congested; the teeth covered with tartar, and the breath offensive. The dog is slothful, and exertion is followed by distress. Cough may or may not exist; but it usually appears towards the latter period of the attack.

Asthma is spasm of the bronchial tubes, and when it is thoroughly established it is seldom to be cured. All medicine can accomplish is the relief of the more violent symptoms. The fits may be rendered comparatively less frequent and less severe; but the agents that best operate

to that result are likely in the end to destroy the general health. Between two evils, therefore, the proprietor has to make his choice ; but if he resolves to treat the disorder, he must do so knowing the drugs he makes use of are not entirely harmless.

Food is of all importance. It must be proportioned to the size of the patient, and be rather spare than full in quantity. Flesh should be denied, and coarse vegetable diet alone allowed. The digestion must also be attended to, and every means taken to invigorate the system. Exercise must be enforced, even though the animal appear to suffer in consequence of being made to walk. The skin should be daily brushed, and the bed should not be too luxurious. Sedatives are of service ; and as no one of these agents will answer in every case, a constant change will be needed, that, by watching their action, the one which produces the best effect may be discovered. Opium, belladonna, hyoscyamus, assafœtida, and the rest, may be thus tried in succession ; and often small doses produce those effects which the larger one seems to conceal. A pill containing any sedative, with an alterative quantity of some expectorant, may be given three times daily ; but when the fit is on, I have gained the most immediate benefit by the administration of ether and opium. From one to four leeches to the chest, sometimes, are of service ; but small ammoniacal blisters applied to the sides, and frequently repeated, are more to be depended upon. Trivial doses of antimonial wine or ipecacuanha wine, with an occasional emetic, will some-

times give temporary ease; but the last-named medicines are to be resorted to only after due consideration, as they greatly lower the strength. Stomachics and mild tonics at the same time are to be employed; but a cure is not to be expected. The treatment cannot be absolutely laid down; but the judgment must be exercised, and whenever the slightest improvement is remarked every effort must be made to prevent a relapse.

HEPATITIS.

LIVER complaints were once fashionable. A few years ago the mind of Great Britain was in distress about its bile, and blue pill with black draught literally became a part of the national diet. At present nervous and urinary diseases appear to be in vogue; but, with dogs, hepatic disorders are as prevalent as ever. The canine liver is peculiarly susceptible to disease. Very seldom have I



CHRONIC HEPATITIS.

dipped into the mysteries of their bodies but I have found

the biliary gland of these animals deranged ; sometimes inflamed—sometimes in an opposite condition—often enlarged—seldom diminished—rarely of uniform color—occasionally tuberculated—and not unfrequently as fat with disease as those are which have obtained for Strasburg geese a morbid celebrity.

It is, however, somewhat strange that, notwithstanding the almost universality of liver disease among petted dogs, the symptoms which denote its existence are in these creatures so obscure and undefined as rarely to be recognised. Very few dogs have healthy livers, and yet seldom is the disordered condition of this important gland suspected. Various are the causes which different authors, English and foreign, have asserted produced this effect. I shall only allude to such as I can on my own experience corroborate, and here I shall have but little to refer to. Over-feeding and excessive indulgence are the sources to which I have always traced it. In the half-starved or well-worked dog I have seen the liver involved ; but have never beheld it in such a state as led me to conclude it was the principal or original seat of the affection which ended in death. On the other hand, in fatted and petted animals, I have seen the gland in a condition that warranted no doubt as to what part the fatal attack had commenced in.

When death has been the consequence of hepatic disorder, the symptoms have in every instance been chronic. I am not aware that I have been called upon to treat a case of an acute description, excepting as a

phase of distemper. It would be too much to say such a form of disease does not exist in a carnivorous animal ; but I have hitherto not met with it. Neither have I seen it as the effect of inveterate mange ; though I have beheld obstinate skin disease the common, but far from invariable, result of chronic hepatitis. I have also known cerebral symptoms to be produced by the derangement of this gland, which, in the dog, may be the cause of almost any possible symptom, and still give so little indication of its actual condition as almost to set our reason at defiance.

When the animal is fat, the visible mucous membranes may be pallid ; the tongue white ; the pulse full and quick ; the spirits slothful : the appetite good ; the fœces natural : the bowels irregular ; the breath offensive ; the anus enlarged, and the rump denuded of hair, the naked skin being covered with a scaly cuticle, thickened and partially insensible.

When the animal is thin, almost all of the foregoing signs may be wanting. The dog may be only emaciated—a living skeleton, with an enlarged belly. It is dull, and has a sleepy look when undisturbed ; but when its attention is attracted, the expression of its countenance is half vacant and half wild. The pupil of the eye is dilated, and the visual organs stare as though the power of recognition were enfeebled. The appetite is good and the manner gentle. The tongue is white, and occasionally reddish towards the circumference. The membranes of the eye are very pale, but not yellow. The lining of

the mouth is of a faint dull tint, and often it feels cold to the touch. The coat looks not positively bad ; but rather like a skin which had been well dressed by a furrier, than one which was still upon a living body.

The history in these cases invariably informs us that the animal has been fat—very fat—about six or twelve months ago. It fell away all at once, though no change was made in the diet ; and yet we learn it has been physicked. No restraint has been put upon buckthorn, castor oil, aloes, sulphur, and antimony, but yet the belly will not go down—it keeps getting bigger ; and now we are told the animal has a dropsy which “wants to be cured.” It is natural the figure and condition should suggest the idea of ascites ; but the hair does not pull out—none of the legs are swollen—the shape of the abdomen wants the appearance of gravitation, and if the patient be placed upon its back the form of the rotundity is not altered by the position of the body. Moreover, the breathing is tolerably easy : and, though if one hand be placed against the side of the belly, and the part opposite be struck with the other, there will be a marked sense of fluctuation ; still we cannot accept so dubious a test against the mass of evidence that declares dropsy is not the name of the disease. To make sure, we feel the abdomen near to the line of the false ribs. This gives no pain, so we press a little hard, and in two or three places on either side, on the right, or may be the left, high up or low down ; for in abnormal growths there can be no rule—in two or three places we can detect hard, solid, but smooth lumps

within the cavity. This last discovery leaves no room for further doubt, so we pronounce the liver to be the organ that is principally affected. In chronic cases, especially after the dog has begun to waste, enlargement nearly always may be felt, not invariably hard, yet often so, but never soft or so soft as the other parts; and this proof should, therefore, in every instance of the kind be sought for.

With regard to treatment, the food must not be suddenly reduced to the starvation point. Whether the dog be fat or lean, let the quality be nutritious, and the quantity sufficient; from a quarter of a pound to a pound and a half of paunch, divided into four meals, will be enough for a single day; but nothing more than this must be given. Tonics, to strengthen the system generally, should be employed; and an occasional dose of the cathartic pills administered, providing the condition is such as justifies the use of purgatives. Frequent small blisters, applied over the region of the liver, may do good; but they should not be larger than two or four inches across, and they should be repeated one every three or four days. Leeches put upon the places where hardness can be felt, also are beneficial; but depletion must be regulated by the ability of the animal to sustain it. A long course of iodide of potassium in solution, combined with the liquor potassæ, will, however, constitute the principal dependence.

Iodide of potassium . .	Two drachms two scruples.
Liquor potassæ . . .	One ounce and a half.
Simple syrup	Six ounces.
Water	Twelve ounces and a half.

Give from half a teaspoonful to a teaspoonful three times a day.

The above must be persevered in for a couple of months before any effect can be anticipated. Mercury I have not found of any service, though Blaine speaks highly of it, and Youatt quotes his opinion. Perhaps I have not employed it rightly, or ventured to push it far enough.

Under the treatment recommended, the dog may be preserved from speedy death; but the structures have been so much changed that medicine cannot be expected to restore them. The pet may be saved to its indulgent mistress, and again perhaps exhibit all the charms for which it was ever prized; but the sporting-dog will never be made capable of doing work, and certainly it is not to be selected to breed from after it has sustained an attack of hepatitis.

Sometimes, during the existence of hepatitis, the animal will be seized with fits of pain, which appear to render it frantic. These I always attribute to the passage of gall stones, which I have taken in comparative large quantities from the gall-bladders of dogs. The cries and struggles create alarm, but the attack is seldom fatal. A brisk purgative, a warm bath, and free use of laudanum and ether, afford relief; for when the animal dies of chronic hepatitis, it perishes gradually from utter exhaustion.

The post-mortem examination generally presents that which much surprises the proprietor; one lobe of the gland is very greatly enlarged; it evidently contains

fluid. It has under disease become a vast cyst, from which, in a setter, I have actually extracted more than two gallons of serum: from a small spaniel I have taken this organ so increased in size that it positively weighed one half the amount of the body from which it was removed. The wonder is that the apparently weak covering to the liver could bear so great a pressure without bursting.

INDIGESTION.

THINGS must seem to have come to a pretty pass when a book is gravely written upon dyspepsia in dogs. Nevertheless, I am in earnest when I treat upon that subject; and could the animals concerned bear witness, they would testify it was indeed no joke. The Lord Mayor of London does not retire from office with a stomach more deranged than the majority of the canine race, shielded by his worshipful authority, could exhibit. The cause in both instances is the same. Dogs as they increase in years seem to degenerate sadly; till at length they mumble dainties and relish flavors with the gusto of an alderman. Pups even are not worthy of unlimited confidence. The little animals will show much ingenuity in procuring substances that make the belly ache; and, with infantine perversity, will, of their own accord, gobble things which, if administered, would excite shrieks of resistance. A litter of high-bred pups is a source of no

less constant annoyance, nor does it require less incessant watching, than a nursery of children. There is so much similarity between man and dog that, from fear of too strongly wounding the self-love of my reader, I must drop the subject.

Indigestion in dogs assumes various forms, and is the source of numerous diseases. Most skin affections may be attributed to it. The inflammation of the gums, the foulness of the teeth, and the offensiveness of the breath, are produced by it. Excessive fatness, with its attendant asthma and hollow cough, are to be directly traced to a disordered digestion. In the long run, half of the petted animals die from diseases originating in this cause; and in nearly every instance the fault lies far more with the weakness of the master than with the corruptness of the beast. He who is invested with authority has more sins, than those he piously acknowledges his own, to answer for.

The symptoms are not obscure. A dislike for wholesome food, and a craving for hotly spiced or highly sweetened diet, is an indication. Thirst and sickness are more marked. A love for eating string, wood, thread, and paper, denotes the fact; and is wrongly put down to the prompting of a mere mischievous instinct: any want of natural appetite, or any evidence of morbid desire in the case of food, declares the stomach to be disordered. The dog that, when offered a piece of bread, smells it with a sleepy eye, and without taking it licks the fingers that present it, has an impaired diges-

tion. Such an animal will perhaps only take the morsel when it is about to be withdrawn; and, having got it, does not swallow it, but places it on the ground, and stands over it with an expression of peevish disgust. A healthy dog is always decided. No animal can be more so. It will often take that which it cannot eat, but, having done so, it either throws the needless possession away or lies down, and with a determined air watches "the property." There is no vexation in its looks, no captiousness in its manner. It acts with decision, and there is purpose in what it does. The reverse is the case with dogs suffering from indigestion. They are peevish and irresolute. They take only because another shall not have. They will perhaps eat greedily what they do not want if the cat looks longfully at that which had lain before them for many minutes, and which no coaxing could induce them to swallow. They are, in their foibles, very like the higher animal.

The treatment is simple. The dog must be put upon, and strictly kept upon, an allowance. Some persons, when these animals are sent to them, because the creatures are fat and sickly, shut the dogs up for two or four days, and allow them during the period to taste nothing but water. The trick often succeeds, but it is dangerous in severe cases, and needless in mild ones. This is a heartless practice, which ignorance only would resort to; but such conduct is very general, and the people who follow it boast laughingly of its effect. They do not care for its consequences. A weakly stomach cannot be

benefited by a prolonged abstinence. I have kept a dog four-and-twenty hours without food, but never longer, and then only when the animal has been brought to me with a tale about its not eating. The report, then, is assurance that food has been offered, and the inference is that the stomach is loaded. A little rest enables it to get rid of its contents, and in some measure to recover its tone. The dog, as a general rule, does well on one meal a day; afterward, the food is regularly weighed, and nothing more than the quantity is permitted. This quantity may be divided into three or four meals, and given at stated periods, so that the last is eaten at night. When thus treated, animals, which I am assured would touch nothing, have soon become possessors of vigorous appetites. At the same time, exercise and the cold bath every morning is ordered; and either tonic or gentle sedatives, with alkalies and vegetable bitters, are administered. The following are the ordinary stomach-pills, and do very well for the generality of cases:—

Extract of hyoscyamus . . .	Sixteen grains.
Sodæ carb.	Half an ounce.
Extract of gentian . . .	Half an ounce.
Ferri carb.	Half an ounce.

Make into sixteen, thirty, or eight pills, and give two daily.

The reader, however, will not depend upon any one compound, for stomach disease is remarkably capricious. Sometimes one thing and sometimes another does a great

deal of good; but the same thing is seldom equally good in any two cases. Stimulants, as nitrate of silver, tris-nitrate of bismuth, or nux vomica, are occasionally of great service; and so also are purgatives and emetics, but these last, when they do no benefit, always do much injury. They should, therefore, be tried last, and then with caution, the order being thus:—Tonics, sedatives, and alkalies, either singly or in combination, and frequently changed. Stimulants and excitants in small doses, gradually increased. Emetics and purgatives, mingled with any of the foregoing. The food and exercise, after all, will do more for the restoration than the medicine, which must be so long continued that the mind doubts whether it is of any decided advantage. The affection is always chronic, and time is therefore imperative for its cure.

Dogs are afflicted with a disease of the stomach, which is very like to "water-brash," "pyrosis," or "cardialgia," in the human being. The animals thus tormented are generally fully grown and weakly: a peculiarity in the walk shows the strength is feeble. The chief symptom is, however, not to be mistaken. The creature is dull just before the attack: it gets by itself, and remains quiet. All at once it rises; and without an effort, no premonitory sounds being heard, a quantity of fluid is ejected from the mouth, and by the shaking of the head scattered about. This appears to afford relief, but the same thing may occur frequently during the day. This disease of itself is not dangerous; but it is trouble-

some, and will make any other disorder the more likely to terminate fatally ; it should, therefore, be always attended to. The food must not be neglected, and either a solution of the iodide of potassium with liquor potassæ, or pills of trisnitrate of bismuth, must be given. The preparations of iron are sometimes of use ; and a leech or two, after a small blister to the side, has also seemed to be beneficial. When some ground has been gained, the treatment recommended for indigestion generally must be adopted, the choice of remedies being guided by the symptoms. The practitioner, however, must not forget that the mode of feeding has probably been the cause ; and, therefore, it must ever after be an object of especial care. The cold bath and exercise, proportioned to the strength, are equally to be esteemed.

Very old dogs often die from indigestion, and in such cases the stomach will become inflated to an extent that would hardly be credited. These animals I have not observed to be subject to flatulent colic ; when, therefore, the abdomen becomes suddenly tympanitic the gas is usually contained in the stomach. Fits and diarrhœa may accompany or precede the attack, which in the first instance yields to treatment ; but in a month more or less returns, and is far more stubborn. Ether and laudanum, by mouth and enema, are at first to be employed ; and, generally, they are successful. The liquor potassæ, chloride of lime in solution, and aromatics with chalk, may also be tried, the food being

strengthening but entirely fluid. The warm bath is here highly injurious; and bleeding or purging out of the question. When the distension of the stomach is so great as to threaten suffocation, the tube of the stomach-pump may be introduced; but, unless danger be present, the practitioner ought to depend upon the efforts of nature, to support which all his measures should be directed. After recovery, meat scraped as for potting, without any admixture of vegetables, must constitute the diet; and while a sufficiency is given, a very little only must be allowed at a time. With these precautions the life may be prolonged, but the restoration of health is not to be expected.

GASTRITIS.



Dogs are abused for their depraved tastes, and reproached for the filth they eat; but if one of them, being of a particular disposition in the article of food, takes to killing his own mutton, he is knocked on the head as too luxurious. It is a very vulgar mistake to imagine the canine race have no preferences. They

have their likes and dislikes quite as strong and as capricious as other animals. Man himself does not more frequently impair his digestion by over indulgence than does the dog. In both cases the punishment is the same, but the brute having the more delicate digestion suffers most severely. The dog's stomach is so subject to be deranged that few of these creatures can afford to gormandize ; to which failing, however, they are much inclined. The consequence is soon shown. A healthy dog can make a hearty meal and sleep soundly after it. The petted favorite is often pained by a moderate quantity of food, and frequent are the housemaid's regrets that his digestion is not more retentive. He spoils other things besides victuals ; and the more daintily he lives the more generally is he troublesome. It is the variety that diseases him. He grows to be omnivorous. He learns to relish that which nature did not fit him to consume, and as a consequence he pays for his bad habits. The dog in extreme cases can digest even bones ; a banquet of tainted flesh will not disorder him ; but he cannot subsist in health on his lady's diet. His stomach was formed to receive and assimilate certain substances, and to deny these is not to be generous or kind.

Gastritis is very common with ladies' favorites. Its symptoms are well marked. Frequent sickness is the first indication. This is taken little notice of. The mess is cleared up, and the matter is forgotten. Thirst

is constant, and the lapping is long; but no further notice is taken of this circumstance, than to remark the animal has grown very fond of water. At last the thirst has increased, and no sooner is the draught swallowed than it is ejected. The appetite which may have been ravenous a little time before, now grows bad, and whatever is eaten is immediately returned. The animal is evidently ill. The nose is dry, and the breathing quick. It avoids warmth, and lies and pants, away from the hearthrug. It dislikes motion and stretches itself out, either upon its chest or on its belly. Sometimes it moans, and more rarely cries. The stomach is now inflamed; and if the symptoms could have been earlier understood, frequently has the animal been seen, prior to this stage of attack, licking the polished steel fire-irons. It has been horrifying its mistress's propriety, by its instinctive desire to touch something cold with its burning tongue; and the poor little beast perhaps has been chastised for seeking a momentary relief to its affliction.

Dogs that are properly treated rarely have gastritis. When they do, it is generally induced by some unwholesome food. I have known it to be caused by graves more often than by anything else they are accustomed to eat. I never recommend this stuff to be given to dogs. Meal and skim milk is far better, and that can always be procured where flesh is scarce. The entrails of sheep, &c., if washed and boiled with a large quantity of any kind of meal, are nutritious and wholesome; nay, even when a little tainted, they will not be refused. If, however, they

were hung up in a strong draught, they would soon dry ; and in that state might be preserved for use any length of time ; all they afterwards require would be boiling. The paunch can be prepared in the same manner ; and it would be worth some little trouble to avoid a mixture which contains nothing strengthening, and too often a great deal that is injurious.

The treatment of gastritis is simple. It is generally accompanied by more or less diarrhœa ; but the violence of the leading symptom renders that of comparatively little consequence. The degree of sickness will always indicate whether the stomach is the principal seat of disease.

As nothing is retained, it would be a needless trouble to give many solids or fluids, by the mouth. From half a grain to a grain and a half of calomel, thoroughly mixed with the same quantities of powdered opium, may be sprinkled upon the tongue ; and from one drachm to four drachms of sulphuric ether may be given in as much water as will dissolve it twenty minutes afterwards. The medicine will most probably be ejected ; but, as it is very volatile, it may be retained sufficient time to have some influence in quieting the spasmodic irritability of the stomach. Ethereal injections should be administered every hour, and no food of any kind allowed. Besides this, from a quarter of a grain to a grain of opium may be sprinkled on the tongue every hour ; and the ether draught continued until the sickness ceases, or the animal displays signs of being narcotised. An ammoniacal blis-

ter, if the symptoms are urgent, may be applied to the left side; but in mild cases, a strong embrocation will answer every purpose. Except the constitution be vigorous, and the pulse very strong, it will not be advisable to bleed, but from two to twelve leeches may be applied to the lower part of the chest. Cold water may be allowed in any quantity, but nothing warm should be given. The colder the water, the better, and the more grateful it will be to the animal. Where it can be obtained, a large lump of ice may be placed in the water, for the dog often will lick this, and sometimes even gnaw it. Small lumps of ice may be forced down as pills, and a cold bath may be given, the animal being well wrapped up afterwards, that it may become warm, and the blood, by the natural reaction, be determined to the skin.

When the sickness is conquered, the following should be administered:—

Powdered nux vomica	. . .	A quarter of a grain to a grain.
Sulphate of iron	. . .	One grain to four grains.
Extract of gentian	. . .	Sufficient to make a pill.

The above may be repeated every four hours until the stomach is quiet; but it is not always tranquillized; sickness may return, and the pills may possibly seem to aggravate it. If such should appear to be the case, try the next:—

Acid hydrocyanic, L. P.	. . .	One drop to four drops.
Carbonate of soda	. . .	Three grains to twelve grains.
Water	. . . . .	A sufficiency.

The ether and opium must also be persevered with, regulating the last of course by the action which it induces.

Food should consist of cold broth, slightly thickened with ground rice, arrowroot, starch, or flour, and for some days it must be composed of nothing more ; but by degrees the thickness may be increased, and a little bread and milk introduced. After a time a small portion of minced underdone meat, without skin or fat, may be allowed ; but the quantity must be small, and the quality unexceptionable.

The second day generally sees an abatement of the more urgent symptoms, and then the draught may be composed of five minims of laudanum to every drachm of ether, and ten drachms of water. This to be given both by mouth and injection six times daily. The former pills were intended only to allay the primary violence of the disease, and when that object is attained, the following remedy may be employed :—

Extract of hyoscyamus .	One grain to four grains.
Carbonate of soda . . .	Three grains to twelve grains.
Carbonate of ammonia .	Half a grain to two grains.
Extract of gentian . . .	Five grains to a scruple.
Powdered quassia . . .	A sufficiency.

The above is for one pill, which should be repeated four times daily, and continued for some days ; when, if the dog seems quite recovered, a course of the quinine tonic pills, as recommended for distemper, will be of use ; but should any suspicion be created of the disorder not

being entirely removed, the animal may be treated as advised for indigestion.

Sporting dogs are frequently sent to me suffering under what the proprietors are pleased to term "Foul." The history of these cases is soon known. They have been withdrawn from the field at the close of the season, and have ever since been shut up in close confinement, while the working diet has been persevered with. The poor beast is supposed capable of vegetating until the return of the period for shooting requires his services. He remains chained up till he acquires every outward disease to which his kind are liable ; and then, when he stinks the place out, his owner is surprised at his condition, pronouncing his misused animal to be "very foul." "Foul" is not one disease, but an accumulation of disorders brought on by the absence of exercise with a stimulating diet. The sporting dog, when really at work, may have all the flesh it can consume ; but at the termination of that period its food should consist wholly of vegetable substances, while a *little* exercise daily is necessary, not to health, but absolutely for life. The dog with "foul" requires each seat of disease to be treated separately ; beginning of course with the dressing for mange or for lice, one or the other of which the animal is certain to display.

DISEASES DEPENDENT ON AN INTERNAL ORGAN.

STOMACH.—ST. VITUS'S DANCE.

THIS disease generally is assumed to be a nervous disorder, and so the symptoms declare it to be; but on *post mortem* examinations no lesion is found either upon the brain, spinal marrow, or the nerves themselves. This last circumstance, however, proves nothing; for the same thing may be said of tetanus in the human being, and of stringhalt in the horse; both of them being well-marked nervous affections. I append St. Vitus's Dance to the stomach, not because of that which I have not beheld, but because of that which I have positively seen.

It follows upon distemper. I do not know it as a distinct disorder, though it is asserted to exist as such when the greater or leading disease is unobserved. It then follows up the affection which primarily involves the stomach and intestines, and to which indications all other symptoms are secondary. On every *post mortem* which I have made of this disorder, I have discovered the stomach inflamed; and, therefore, not because the nerves or their centres are blank, but because on one important viscus I have found well marked signs to impress my reason, I propose to treat of this disorder as connected with the stomach.

The signs to which I allude, consists of patches of well-defined inflammation; and hence, knowing how dis-



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temper has the power to involve other organs, I conclude it has caused the spinal marrow to be sympathetically affected.

The symptoms of the disease are well marked. The poor beast, whether he be standing up or lying down, is constantly worried with a catching of the limb or limbs—for only one may be affected, or all four may be attacked. Sleeping or waking, the annoyance continues. The dog cannot obtain a moment's rest from its tormentor. Day and night the movement remains; no act, no position the poor brute is capable of, can bring to the animal an instant's downright repose. Its sleep is troubled and broken; its waking moments are rendered miserable by this terrible infliction. The worst of the matter is, that the dog in every other respect appears to be well. Its spirits are good, and it is alive for happiness. If it were released from its constant affliction, it is eager to enjoy its brief lease of life as in the time of perfect health. Plaintive and piteous are its looks as, lying asleep before the fire, it is aroused by a sudden pain; wakes, turns round, and mutely appeals to its master for an explanation or a removal of the nuisance. When stricken down at last, as, unable to stand, it lies upon its straw, most sad is it to see the poor head raised, and to hear the tail in motion welcoming any one who may enter the place in which it is a helpless but a necessary prisoner.

In this disorder the best thing is to pay every attention to the food. The wretched animal generally has an enormous appetite, and, when it is unable to stand, will

continue feeding to the last. This morbid hunger must not be indulged. One pound of good rice may be boiled or cooked in a sufficiency of carefully made beef-tea, every particle of meat or bone being removed. This will constitute the provender for one day necessary to sustain the largest dog, and a quarter the amount will be sufficient for one of the average size. Where good rice is not to be obtained, oatmeal or bread, allowing for the moisture which the last contains, may be substituted. No bones, nor substances likely, when swallowed, to irritate the stomach, must on any account be allowed. The quantity given at one time must ever be small ; and every sort of provender offered should be soft and soothing to the internal parts ; though the poor dog will be eager to eat that which will be injurious. Water should be placed within its reach, and offered during the day, the head being held while the incapacitated animal drinks.

When a dog is prostrated by this affliction, it must on no account be suffered to remain on the floor, where its limbs would speedily become excoriated, being forcibly moved upon the boards ; anything placed beneath the animal to save the limbs, would be saturated with the urine and feces the poor beast is necessitated to pass. The best bed in such cases is made of a slanting piece of woodwork, of sufficient size to allow the animal to lie with ease at full length. The planks composing the wooden stage must be placed apart, be pierced with numerous holes, have the edges rounded, and be elevated at one end so as to allow all moisture readily to run off.

The wood must be covered with a quantity of straw; which sort of bedding is convenient, not only because it allows the water to speedily percolate through it, but because it is warm, and being cheap, permits of repeated change.

Physic is not of much avail in this disorder; kind nursing and mild food will do more towards recovery. Still, medicine, as an accessory, may be of considerable service, and in a secondary view deserves honorable mention. Alkalies, sedatives, and vegetable bitters, may be combined in various forms. The author's favorite sedative in stomach diseases is *hyoscyamus*, and alkali potash. For a bitter, *quassia* is a very good one; better than *gentian*, a small amount of the extract of which, however, may be used to make up the pill. When speaking of the pill, the most important ingredient must not be forgotten—I mean *nux vomica*. Some people employ *strychnia*, but such persons more often kill than cure their patients. *Strychnia* in any doses, however minute, is a violent poison to the dog. While at college I beheld animals killed with it; and there does not live the person who knows how to render this agent safe to the dog. *Nux vomica*, even, must be used in very minute doses, to be entirely safe—from a quarter of a grain to a small pup, to two grains to the largest animal. That quantity must be continued for a week, four pills being given daily; then add a quarter of a grain daily to the four larger pills, and a quarter of a grain every four days to all the smaller ones; keep on increasing the amount, till the physiological effects of the drug, as they

are called, become developed. These consist in the beast having that which uninformed people term "a fit." He lies upon the ground, uttering rather loud cries, whilst every muscle of his body is in motion. Thus he continues scratching, as if it was his desire to be up and off at a hundred miles an hour. No sooner is he rid of one attack than he has another. He retains his consciousness, but is unable to give any sign of recognition. It is useless to crowd round the animal in this state ; the drug must perform its office, and will do so, in spite of human effort. The very best thing that can be done, is to let the animal alone until the attack is over, when writers on *Materia Medica* tell us improvement is perceptible. I wish it was so in dogs. I have beheld the physiological effect of *nux vomica* repeatedly, but cannot recollect many instances in which I could date amendment from its appearance.

The following is the formula for the pill recently alluded to :—

Potash	Two to seven grains.
Extract of hyoseyamus.	Half a grain to four grains.
Quassia powder	Three to sixteen grains.
Nux vomica	A quarter of a grain to two grains.
Extract of gentian	A sufficiency.

The above quantities are sufficient for one pill, four of which are to be given daily for a week, at the expiration of which period the increase may begin. If the above, after a fair test has been made of it, does not succeed,

trial may be instituted of the nitrate of silver, the trisnitate of bismuth, or any of the various drugs said to be beneficial in the disease, or of service in stomach complaints. In this disorder the same drug never appears to act twice alike, therefore a change is warranted and desirable.

Hopes of restoration may be entertained if the animal can only be kept alive to recover strength ; then confident expectation can be expressed that the dog will outgrow the disease. The first signs perceptible which denote recovery are these :—The provender the beast consumes is evidently not thrown away. Instead of eating much, and ungratefully becoming thinner and thinner upon that which it consumes, the animal displays a disposition to thrive upon its victuals. It does not get fat on what it eats, but it evidently loses no flesh. It grows no thinner ; and if the strength be not recruited, it obviously is not diminished. The animal does not gorge much wholesome diet daily, to exhibit more and more the signs of debility and starvation. If only a suspicion can be felt that the poor dog does not sink, then hope of ultimate success may warm the heart of a kind master ; but when the reverse is obvious, though killing a dog is next to killing a child—and he who for pleasure can do the one, is not far off from doing the other—yet it is mercy then to destroy that existence which must else be miserably worn away. When there is no chance left for expectation to cling to, it becomes real charity to do violence to our feelings, in order that we may spare a suffer-

ing creature pain ; but when there is a prospect, however remote, of recovery, I hope there is no veterinary surgeon who would touch the life. When the animal can stand, we may anticipate good ; and whatever is left of the complaint, we may assure our employers will vanish as the age increases ; for St. Vitus's Dance is essentially the disease of young dogs. But as recovery progresses, we must be cautious to do nothing to fling the animal back. No walks must be enforced, under the pretence of administering exercise. The animal has enough of that in its ever-jerking limbs ; and however well it may grow to be while the disease lasts, we may rest assured the dog suffering its attack stands in need of repose.

BOWEL DISEASES.

CONTINUOUS with the stomach are the intestines, which are equally subject to disease, and more exposed to it in an acute form than even the former viscus. The dog will fill its belly with almost anything, but there is little that positively agrees with it. Boiled rice or lean meat, &c., and coarse biscuit, are the best general food ; but without exercise, even these will not support health. The dog requires constant care if it is deprived of liberty : and those who keep these animals as pets, must submit to trouble, for though art may do much, it cannot conquer Nature

The intestines of the dog are peculiar. In the first place, it has no colon, and all the guts are nearly of one

size from the commencement to the termination; the duodenum and the most posterior portion of the rectum being the largest, though not so much so as materially to destroy the appearance of uniformity. The cæcum is no more than a small appendage—a little sac attached to the main tube; it has but one opening, and that is very diminutive. I think all the food, as in other animals, passes into and out of this intestine; which, because of its peculiar formation, is therefore particularly liable to be disordered. In the dog which has died of intestinal disease, the cæcum is almost invariably found enlarged and inflamed. In it, I imagine, the majority of bowel affections have their origin. The gut is first loaded, and the consequence of this is, it loses its natural function. The contents become irritants from being retained, and the whole process of digestion is deranged; other parts are involved, and inflammation is induced.

Writers do not notice the tendency of the cæcum to be diseased, or remark upon its disposition to exhibit signs of alteration; but the fact being so obvious, I wonder it should have escaped observation.

COSTIVENESS is, in some measure, natural to the dog, and in that animal is hardly to be viewed as a disease. In health, the fæces are not expelled without considerable straining, and the matter voided ought to be of a solid character. It nevertheless should not be absolutely hard, or positively dry, for in that case the want of moisture shows the natural secretion of the rectum is deficient; the

hardness proving prolonged detention, denoting the intestines have lost their activity.

Both Blaine and Youatt were educated in the old school of medicine, which taught them to regard purgatives as the surgeon's best friends, and the sheet-anchors of his practice. They prescribe them in almost every case, and almost on every occasion; but I rarely give these agents. In the dog I am convinced they are not safe, and their constant use is by no means imperative. Should an animal be supposed not to have been relieved for a week, this fact is no proof that a purgative is required. The animal may have eluded observation, and it cannot inform us if such has been the case. The intestines may be slow, or the digestion may be more than usually active. It is foolish to lay down rules for Nature, and punish her creatures if these laws are not obeyed. There are, however, means of ascertaining when a purgative is needed; and these, if employed, will very rarely deceive.

The muscles covering the abdomen of the dog are very thin, and through them the contents of the cavity may be plainly felt. By squeezing these together, the fingers will detect whether the rectum, which lies near to the spine, and of course backward or towards the tail, contains any substance. Should the presence of any solid body be ascertained, its character ought to be noted. If round and comparatively soft, a little exercise will cause it to be expelled; but if hard-pointed in places, and uneven, assistance should be afforded. An enema, of the solution

of soap—or of Epsom salts, from half an ounce to a quarter of a pound, in a quarter of a pint to a quart of water—may be administered. A more active injection will be, from half a drachm to four drachms of turpentine, beaten up with the yolks of so many eggs as there are drachms of the oil, and mixed with the quantity of water just named.

Either of these will relieve the bowels; but the condition of one part justifies an inference as to the state of another, and the enema probably will not unload the cæcum, which there is reason to suppose is also clogged. A gentle dose of castor-oil, or of the pills directed on page 116, will accomplish this intention; and, afterwards, measures must be adopted to regulate the digestion, either by tonics or such medicines as the symptoms suggest, but not by the constant repetition of laxatives.

Costiveness will sometimes produce such violent pain that alarm is created, and dogs have been destroyed under the idea that they were rabid. To guard against so fatal a mistake, I shall only here say, that rabies does not come on suddenly, or, save in the latest stage, appear to influence the consciousness, which it never entirely overpowers. The agony caused by costiveness is greater than in any other affection to which the dog is liable. Apparently well, and perhaps at play, a cry breaks forth, which is the next instant a shriek, expressive of the acutest torture. The animal takes to running, and is not aware of surrounding objects; it can recognise nothing, but will bite its master if he attempts to catch

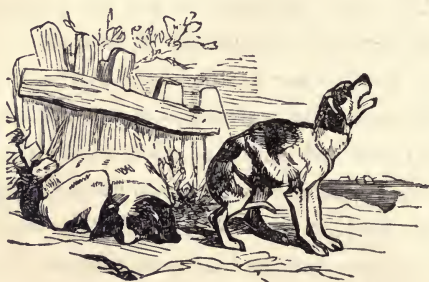
it, and hit itself against anything that may be in its way ; it scampers from room to room, or hurries from place to place ; it is unable to be still or silent ; and perhaps getting into a corner, it makes continuous efforts as though it wished to scramble up the wall, remaining there jumping with all its strength, and at the same time yelling at the top of its voice. This excitement may last for an hour or more, and then cease only to be renewed ; till at length the powers fail, and in half a day the animal may be dead. Just prior to death, a mass of compact fæces is usually passed ; and blood, with dysentery, is generally witnessed for the short period the animal survives. After death, general inflammation of the intestines is discovered, and the dog is reported to have perished from an attack of enteritis which no medicine could subdue.

In such cases, the first examination should be directed to the rectum ; the finger, moistened or oiled, ought to be inserted, and the intestine explored as thoroughly as possible. This operation is, however, not of further use than to confirm the opinion of the practitioner ; and I, knowing the cause, therefore dispense with it. A copious enema should be immediately exhibited. One containing turpentine is the most effective ; but, on account of its activity, it is only safe in the beginning of the attack. A warm bath is of service, but it takes up time which may be better employed, and does not do sufficient good to recompense for the delay. A full dose of sulphuric ether and laudanum should be given to allay the pain, and it may with this intention be repeated every ten or

twenty minutes. If, from the enema, nothing follows, the finger should then certainly be introduced, and perhaps a compact mass may be felt firmly grasped by the intestine. Slowly, and with great caution, this must be broken up, and brought away bit by bit. The handle of a spoon has been recommended for this purpose, but I entreat my readers not to use it. Where pain is present, and life or death hang on the issue, there is no right to be any delicacy. An instrument of any kind introduced into such a part, and employed while the body is writhing about in agony, cannot be free from danger, and scarcely can be so used as to be effective. The finger is the quickest, the most safe, and the most effectual instrument; for we have it under our command, can guide it at our will, and with it take cognisance of all the circumstances presented. Even that must be employed gently, and this will be best done by the avoidance of haste. The surgeon is bound to be skilful, but he ought never to be in a hurry. Let all the time that can be occupied on such a matter be freely taken, and during the process, let the cries of the animal be attended to; any change of note will contain a warning which must not be disregarded. Without attending to that, the intestine might be ruptured, and death would then be certain.

When the obstruction has been overcome, let a few ethereal enemata be administered to allay any local irritability; and a dose of the purgative pills—followed, six hours afterwards, should they not have operated, by one of castor-oil mixture, blended with half a scruple of chlo-

roform—being given to unload the cæcum. The medicine having acted freely, the food must be amended, the treatment altered, and such other measures taken as the digestion may require for its restoration.



COLIC.—This is an affection to which dogs are very subject. The human infant is not more liable to be griped than are the young of the canine species. The idea of a cur with a belly-ache may, to some persons, seem to be suggestive of fun; but to the creature that suffers, it is indeed a serious business. A duchess with the spasms does not endure so much, and is not in half the danger, that a dog is exposed to during a fit of gripes. The animal must be relieved, or inflammation will speedily ensue, and death will follow. In some cases, the appearance of colic is almost a certain indication that the poor beast will die. When it comes on a week or two prior to pupping, we may cure it; but during, or soon after parturition, the bitch generally perishes. When it starts up in the later or more virulent stage of distemper, especially at the time

when the champing of the jaw denotes the approach of fits, the chance of a favorable termination to the disease is materially diminished. When in a violent form it attacks a litter of puppies, either simultaneously or consecutively, it is always attended with danger. At no season, and under no circumstances, is it trivial, and never ought it to be neglected. The cries and distress of the suffering animal will, when it is fully established, enforce attention ; but too often it has then proceeded so far that much medicine will not check what in the first instance a single dose might have entirely banished.

The symptoms of colic have been much confused by Blaine, who, when describing them, evidently alludes to many forms of disease with which abdominal spasm has no connexion. Youatt is far more clear ; but he is too concise, and omits so much that the reader does not properly appreciate the importance of that affection which is thus slightly mentioned. Neither of the two authors seems to have carefully studied the subject ; for in their writings is not to be found any account of those early symptoms which most readily yield to treatment.

Prior to evincing any sign of colic, the dog appears well ; healthy in its body and easy in its mind. The appetite is good, or may be better than usual. The food has been eaten and relished ; then the animal instinctively lies down to sleep and aid digestion. A moan is heard ; the sound is half suppressed, and the dog that utters it appears to sleep. Another cry, as feeble, but of greater length, is noticed ; and now the animal that made it

changes its position. The next time it may rise, look round, and seek another place ; which having found, it appears to settle itself and to go to sleep. The rest once more is broken, the voice grows more full and loud ; the dog jumps up and runs about for a little while, then selects a spot where it curls its body tightly up, as if resolved to have out its nap. The interruption, however, constantly recurs ; and at each return the exclamation is more emphatic—the starting more energetic—the movement more abrupt—and, contrasting these, the determination or desire to repose becomes more strong. Thus endeavoring to sleep, and being constantly disturbed by some sharp and shooting pain, the dog may continue for a day, or two, or three, its cries, during the whole period, offending a neighborhood.

During the continuance of colic, the general appearance of the animal may be but little affected. The eye is not injected, but the pupil may be slightly enlarged. The nose is cool and moist, but towards the end, irritation may render the part hot or dry. The appetite is generally slight—sometimes lost ; and fluids are more readily accepted than solids. The cry, however, should be remarked ; because, with the pulse, it gives the earliest notice when inflammation is commencing. While colic alone exists, the pulse may, from pain, be accelerated, and rendered more full, as well as strong, though not always to any marked extent. In inflammation, the pulse is greatly quickened, the artery becomes smaller, and its beat more jerking or

wiry. During simple spasm the voice is natural, rich, sonorous, and almost musical; but in inflammation it is short, harsh, high, and broken, the exclamations not being continuous, but consisting of a series of disconnected "*yaps*."

For the treatment, in the first instance, a turpentine enema will frequently cut short the attack. Should it fail to so, injections of ether and laudanum should succeed, and doses of the mixture should also be given every half hour; the first three being exhibited at intervals only of a quarter of an hour each. The cathartic pills should be administered; and in three hours, if the bowels have not been acted upon, a dose of castor-oil should be resorted to; but where the cathartic has been responded to, the castor-oil should be delayed for eight or twelve hours.

When the pain ceases, the ether and laudanum should not be immediately discontinued; but they may be employed at longer intervals, and gradually reduced in quantity, until the bowels are thoroughly opened, when they may be withheld. Under this treatment, the affection is rarely fatal, and never so if taken in time. An injection of ether and laudanum should always be given to any pup that exhibits even the slightest symptom of uneasiness. I have never known it to do harm, but I am convinced it has often prevented danger.

In those cases where purging and other indications denote the coats of the bowels to be already involved, and spasm co-exists with enteritis, ether and laudanum

must enter into all the remedies employed. On the dog their action is, in my opinion, always beneficial; and were they not directly so, the influence they possess in deadening pain would be sufficient reason to justify their adoption. The other measures consist of such as will be found mentioned under the head of enteritis; but it is essential to observe any fæces which may be ejected by the animal that has suffered colic; for by these we may sometimes guess the cause of the attack, and more often learn the means through which a return may be prevented.

As to the causes which induce colic, I can of my own knowledge offer no information. It has to me seemed to be regulated by none of those circumstances to which it is generally attributed; at all events, I think I have witnessed it in animals which have not been exposed to any of the causes that teachers and writers assert induce it. Dogs are, however, brought to us only when the cause has ceased; for we are sought for only to treat the effect. The declarations of authors may therefore be correct, although I am unable to corroborate them; and these gentlemen say colic is produced by cold, acrid food, chills, worms, hard water, &c. In cases of this kind, therefore, it may be well to inquire if the dog has been exposed, or badly fed, or is in any way unhealthy; and, so far as possible, to rectify these matters; for, even though they may not have provoked the spasm, nevertheless we shall do good by attending to the health, diet, and comfort of the animal.

ENTERITIS.—The doom of the dog which is really afflicted with this disease, is generally sealed. It is a painful and a fatal disorder—equally rapid and stubborn. I fear it more than any other affection to which the animal is subject, and more frequently than any other has it set my best endeavors at defiance.

In the dog, however, enteritis is rarely seen in a pure form. The mucous membrane of the intestines is mostly inflamed, but the serous covering, as a general rule, is in no degree involved. The stomach, however, is almost in every instance more or less implicated ; its inner surface being inflamed, and its muscular coat so contracted, that the lining membrane is corrugated, and remains in that condition after death.

The incentives are, unwholesome food, which is the most frequent of the causes ; exposure, especially after a dog has been in winter fantastically deprived of its long hair over the loins ; and over-exertion, to which the dog is often exposed, no attention being paid to its condition. Anything which disorders the digestion, or violently shakes the constitution, will induce it ; for in the dog every species of revulsion has a tendency to attack the bowels. Mange improperly treated has produced it ; and this may be said of almost any skin disease ; so that it has been caused not by true mange or itch alone but by a skin disease having been, under the pretence of working an immediate cure, driven into the system. Neglected impactments, or colic, are among its most frequent immediate causes ; for at least three parts of those

cases of enteritis submitted to my notice, have been clearly traced to have commenced with something of that kind.

Of the symptoms of enteritis, colic and constipation, with a hard thin pulse, are the most prominent. Sick-ness is not present, or rather I have not witnessed it, at the commencement of the disorder. The extremities are cold—the eye has a stupid expression, the pupil being much dilated—the breath is hot, and the nose dry. The tail is drawn firmly downward, and pressed upon the anus; the urine is sometimes scanty, always high-colored; the tongue is rough and clammy, the thirst strong, and the appetite lost. The dog seeks darkness and privacy, and does not ramble during the early stage; it will stretch itself out either upon its belly or on its side, and I have not seen it sit upon its haunches. The abdomen is only of the heat of the body, which is generally of an increased temperature. Pressure appears to cause no pain, and the animal rather seems grateful for friction than to resist it. As the disease proceeds, diarrhœa ensues, and with it the signs of exhaustion and death generally are exhibited. Throughout the attack there is a marked disinclination to take any remedy; which is not always displayed by these creatures, and in no other disease is so violently exhibited. Dogs often become attached to those who minister to their complaints; many of them will appear to understand and appreciate the motives of him who attempts their relief. The poor things will frequently submit to operations, and lick the hand which

has performed them. Eloquent are the appeals which they sometimes make to the feelings of one in whom they have placed their confidence; often staggering to meet him when he enters; looking upward into his face, and uttering low cries, which are more expressive than words could possibly be rendered. He who has had much to do with dogs must, if he be not insensible, grow to like them, and gradually learn to think these creatures possess both knowledge and reason. They will sometimes, without a struggle, swallow the most pungent and nauseous drinks; but such is not the case during enteritis. The brain in that disease is always sympathetically affected. the state of the eye, its peculiar expression and dilated pupil, denote the fact; and the manner of the dog would, without these indications, lead us to surmise the circumstance.

The treatment must be energetic. The sharp, short cries, characteristic of enteritis, as pointed out in the preceding description of colic, will be sufficient warning of the danger, and ample intimation that there is no time to be lost. A turpentine enema should be injected. The treatment ought always to begin with this, for to unload the rectum is of all importance. Afterwards, from one to four grains of calomel, with from half a grain to two grains of opium, should be shaken upon the tongue; and when ten minutes have elapsed, a draught of ether and laudanum and water, with an injection of the same composition, ought to be exhibited. While the cries last, the ether may be continued, and when the strength appears

to fail, it may also be employed. Two hours subsequent to the calomel being given, from half an ounce to three ounces of castor-oil, diluted with half the quantity of olive-oil, should be used as a drench; and thrice during the day the following may be administered either as a pill or draught, in thick gruel, soup, or mucilage, at the option of the practitioner; who will, of course, be guided by the disposition of the patient, which in every particular must be considered:—

Grey powder Five grains to a scruple.

Powdered ipecacuanha . Half a grain to four grains.

Extract of hyoscyamus . One to eight grains.

Bleeding is of some service, but the dog so quickly sinks, that it must be practised with caution. On this account, as well as for other reasons, leeches are to be preferred. If the patient be a male, they may be applied to the belly; but if a female, the side of the abdomen must be shaven, and that part selected. From four to twenty-four leeches will be sufficient; and half that number may be again used if no change for the better is observed, and the strength does not fail. Stimulating applications are likewise beneficial. A large mustard poultice has appeared to be more operative than more violent agents. After it has been removed, warm fomentations of water, with occasional ones of hot turpentine, may be employed.

In the early stage, a warm bath of 90 degrees, for half an hour, has been used with advantage; but the ani-

mal, when removed from it, must be wrapped well up in several hot blankets, and kept in them until it is perfectly dry.

On the second day from two to ten drops of the tincture of arnica, with half a drachm of the solution of the chloride of zinc, may be added to the ethereal drinks and injections, if the disorder has not been checked; and beef-tea, thickened with rice, may also be frequently administered, using it instead of water, both in the draughts and injections. No other food is admissible, and the return to solids must, if the animal survives, be very gradual.

DYSENTERY AND DIARRHŒA.—These diseases, which in works on human pathology are advantageously separated, I cannot here treat of as distinct disorders. In the dog they are so connected and blended that the line which divides them cannot be discovered; and for every practical purpose, they may be here considered as one and the same affection.

The young and the old are most liable to these complaints. Puppies are very subject, as also are aged gross favorites; things so fat that it becomes hard work to live are very generally attacked with diarrhœa. The pup, however, usually exhibits it in the acute form, whereas in the other description of animal it mostly appears in the chronic type.

When acute, colic may accompany or precede it. In proportion to the spasm will be the violence and the danger of the disorder. Sickness is mostly witnessed a little

time prior to the attack, and the matter vomited has a peculiarly disagreeable and acrid odor. The dog does not again consume that which the stomach has thrown off, but sneaks away dejected, and afterwards seems dull. Sickness will occasionally continue throughout the complaint, but in general it departs as the disease appears. Thirst, however, is always present ; and there is also a disposition to seek cold things and places. The pulse is quicker, but not stronger, and hardly at first less thin than during health. There is no pain on pressure being applied to the abdomen. The membranes of the eye are not injected ; they may be a little deeper in color than is strictly natural, but occasionally they are the reverse. If, however, the anus be gently forced open, so as to expose the terminating surface of the rectum, the membrane there will be found more red, and perhaps less clear in tint, than it ought to be ; and the presence of purgation, attended with a violent resistance to the administration of clysters, will leave no doubt as to the character of the affection.

In the chronic form, the membrane of the eye is pallid ; the nose often moist ; the breath offensive ; the appetite ravenous ; the pulse quick and weak ; the anus inflamed ; mostly protruding, and usually disfigured by piles ; the fæces liquid, and of various hues ; sometimes black, occasionally lighter than usual, very generally mixed with much mucus and a small quantity of blood, so that the leading symptoms are those of weakness, accompanied with purgation.



SUPERPURGATION.

Acute diarrhœa may terminate in twenty-four hours; the chronic may continue as many days. The first sometimes closes with hemorrhage, blood in large quantities being ejected, either from the mouth or from the anus; but more generally death ensues from apparent exhaustion, which is announced by coldness of the belly and mouth, attended with a peculiar faint and sickly fetor and perfect insensibility. The chronic more rarely ends with excessive bleeding, but almost always gradually wears out the animal, which for days previous may be paralysed in the hind extremities, lying with its back arched and its feet approximated, though consciousness is retained almost to the last moment. In either case, however, the characteristic stench prevails, and the lower surface of the abdomen, as a general rule, feels hard, presenting to the touch two distinct lines, which run in the course of the spine. These lines, which Youatt mentions as cords, are the recti muscles, which in the dog are composed of continuous fibre, and consequently,

when contracted under the stimulus of pain or disease, become very apparent.

On examination after death, the stomach, especially towards the pyloric orifice, is inflamed, as are the intestines, which, however, towards the middle of the track, are less violently affected than at other parts. The cæcum is enlarged, and may even, while all the other guts are empty, contain hard solid fæces. The rectum is generally black with inflammation, and seems most to suffer in these disorders. Occasionally its interior is ulcerated, and such is nearly always its condition towards the anus. Signs of colic are distributed along the entire length of the alimentary tubes.

In the acute disease, the case in the first instance should be treated as directed for colic, with turpentine enema and ether, laudanum and water, followed by mild doses of grey powder and ipecacuanha, or chalk, catechu and aromatics, in the proportions directed below:—

Powdered opium	Half a grain to two grains.
Powdered prepared chalk .	Five grains to a scruple.
Catechu	Two grains to half a scruple.
Liquor potassæ	Half-a-drachm to two drachms.
Powdered ginger	Three to twelve grains.
Powdered caraways . . .	Three to twelve grains.
Powdered capsicums . . .	One to four grains.

This may be given every second hour. The carbonate of ammonia, from two to eight grains, is also deserving of a trial, as are the chlorides and chlorates when the odor is perceived.

Applications, as before directed, to the abdomen are also beneficial; but frequent use of the warm bath should be forbidden, for its action is far too debilitating. The ether, laudanum, and water should be persisted with throughout the treatment, and hope may be indulged so long as the injections are retained; but when these are cast back, or flow out as soon as the pipe is removed, the case may be pronounced a desperate one.

In the chronic form of diarrhœa there is always greater prospect of success. Ether, laudanum, and water will often master it, without the addition of any other medicine; but the liquor potassæ and the chalk preparation are valuable adjuncts. To the anus an ointment will be useful; and it should not only be smeared well over the part, but, by means of a penholder or the little finger, a small quantity should thrice in the course of the day be introduced up the rectum. For this purpose the following will be found to answer much better than any of those which Blaine orders to be employed on similar occasions:—

Camphor powdered . . .	} Of each equal parts.
Mercurial ointment . . .	
Elder ointment.	

Cleanliness is of the utmost importance. Thrice daily, or oftener if necessary, the anus and root of the tail should be thoroughly cleansed, with a wash consisting of an ounce of the solution of chloride of zinc to a pint of distilled water. The food should be generous; but fluid

beef tea, thickened with rice, will constitute the most proper diet during the existence of diarrhœa.

A little gravy and rice with scraped meat may be gradually introduced; but the dog must be drenched with the liquid rather than indulged with solids at too early a period. All the other measures necessary have been indicated when treating of previous abdominal diseases, and such rules as are therein laid down must, according to the circumstances, be applied.

PERITONITIS.—In the acute form this disease is rarely witnessed, save as accompanying or following parturition. Its symptoms are, panting; restlessness; occasional cries; a desire for cold; constant stretching forth at full length upon the side; dry mouth and nose; thirst; constipation; hard quick pulse; catching breathing, and—contrary as it may be to all reasonable expectation—seldom any pain on pressure to the abdomen, toward which, however, the animal constantly inclines the head.

The treatment consists in bleeding from the jugular. from three to twelve ounces being taken; but a pup, not having all its permanent teeth, supposing such an animal could be affected, should not lose more than from half-an-ounce to two ounces. Stimulating applications to the abdomen should be employed, an ammoniacal blister, from its speedy action, being to be preferred. Ether, laudanum, and water ought to be given, to allay the pain, with calomel in small but repeated doses, combined with one-fourth its weight of opium, in order to subdue the inflammation. A turpentine enema to unload

the rectum, and a full dose of castor oil to relieve the bowels, should be administered early in the disease. The warm bath, if the animal is after it well wrapped up, may also be resorted to. A second bleeding may be necessary, but it should always be by means of leeches, and should only be practised upon conviction of its necessity, for no animal is less tolerant of blood-letting than the dog.

During peritonitis, the chief aim of all the measures adopted is to reduce the inflammation ; but while this is kept in view, it must not be forgotten that of equal, or perhaps of even more, importance, is it to subdue the pain and lessen the constitutional irritation which adds to the energy of the disorder, thus rendering nature the less capable of sustaining it. With this object I have often carried ether, laudanum, and water, so far as to narcotise the animal ; and I have kept the dog under the action of these medicines for twelve hours, and then have not entirely relinquished them. The consequence has not always been success, but I have not seen any reason to imagine that the life has not been lengthened by the practice ; and sometimes when the narcotism has ceased, the disease has exhibited so marked an improvement, that I have dated the recovery from that period.

STRANGULATION.—This consists in the intestines being twisted or tied together, and it is caused by sudden emotion or violent exertion. From it the dog is almost exempt, though to it some other animals are much exposed. The symptoms are sudden pain, resembling acute enteritis, accompanied with sickness and constipation, and

terminating in the lethargic ease which characterises mortification.

No treatment can save the life, and all the measures justifiable are such as would alleviate the sufferings of the animal; but as, in the majority of these cases, the fact is only ascertained after death, the practitioner must in a great measure be guided by the symptoms.

INTROSUSCEPTION.—This is when a portion of intestine slips into another part of the alimentary tube, and there becomes fixed. Colic always precedes this, for the accident could not occur unless the bowel was in places spasmodically contracted. The symptoms are—colic, in the first instance, speedily followed by enteritis, accompanied by a seeming constipation, that resists all purgatives, and prevails up to the moment of death. The measures would be the same as were alluded to when writing of strangulation.

STOPPAGE.—To this the dog is much exposed. These animals are taught to run after sticks or stones, and to bring them to their masters. When this trick has been learnt, the creatures are very fond of displaying their accomplishment. They engage in the game with more than pleasure; and as no living being is half so enthusiastic as dogs, they throw their souls into the simple sport. Delighted to please their lords, the animals are in a fever of excitement; they back and run about—their eyes on fire, and every muscle of their frames in motion. The stone is flung, and away goes the dog at its topmost speed, so happy that it has lost its self-com-

mand. If the missile should be small, the poor animal, in its eagerness to seize, may unfortunately swallow it, and when that happens, the faithful brute nearly always dies. The œsophagus or gullet of the dog is larger than its intestines, and consequently the substance which can pass down the throat may in the guts become impacted. Such too frequently follows when stones are gulped; for hard things of this kind, though they should be small enough to pass through the alimentary tube, nevertheless would cause a stoppage; for a foreign body of any size, by irritating the intestine, would provoke it to contract, or induce spasm; and the bowel thus excited would close upon the substance, retaining it with a force which could not be overcome. Persons, therefore, who like their dogs to fetch and carry, should never use for this purpose any pebble so small as to be dangerous, or rather, they should never use stones of any kind for this purpose. The animal taught to indulge in this amusement seriously injures its teeth, which during the excitement are employed with imprudent violence, and the mouth sustains more injury than the game can recompense.

If a dog should swallow a stone, let the animal be immediately fed largely; half-an-hour afterwards let thrice the ordinary dose of antimonial wine be administered, and the animal directly afterwards be exercised. Probably the pebble may be returned with the food when the emetic acts. Should such not be the case, as the dog will not eat again, all the thick gruel it can be made to

swallow must be forced upon it, and perhaps the stone may come away when this is vomited. Every effort must be used to cause the substance to be ejected before it has reached the bowels, since if it enters these, the doom is sealed. However, should such be the case, the most violent and potent antispasmodics may be tried; and under their influence I have known comparatively large bodies to pass. No attempt must be made to quicken the passage by moulding or kneading the belly; much less must any effort be used intended to push the substance onward. The convolutions of the alimentary track are numerous, and the bowels are not stationary; therefore we have no certainty, even if the violence should do no injury, that our interference would be properly directed. Hope must depend upon antispasmodics; while every measure is taken to anticipate the irritation which is almost certain to follow.

Stoppage may be caused by other things besides stones. Corks, pins, nails, skewers, sharp pieces of bone, particularly portions of game and poultry bones, have produced death; and this fact will serve to enforce the warning which was given in the earlier portion of this work.

PARALYSIS OF THE HIND EXTREMITIES.

It appears odd to speak of such an affliction as loss of all motor power in the hind extremities, connected with deranged bowels. What can the stomach have to do with the legs? Why, all and everything. That which

is put into the stomach, nourishes the legs, and that which enters the same receptacle, may surely disease the like parts. That which nurtures health, and that which generates sickness, are more closely allied than we are willing to allow. Thus, a moderate meal nourishes and refreshes; but the same food taken in too great abundance, as surely will bring disease; and it is of too much food that I have to complain, when I speak of the bowels as associated with paralysis. Dogs will become great gluttons. They like to do what they see their master doing; but as a dog's repast comes round but once a day, and a human being eats three or four times in the twenty-four hours, so has the animal kept within doors so many additional opportunities of over-gorging itself. Nor is this all. The canine appetite is soon satisfied; the meal is soon devoured. But it is far otherwise with the human repast. The dog may consume enough provender in a few minutes to last till the following day comes round; whereas the man cannot get through the food which is to support him for six hours, in less than half a division of the time here enumerated. Supposing one or two persons to be seated at table, it is very hard to withstand a pair of large, eloquent, and imploring eyes, watching every mouthful the fork lifts from the plate. For a minute or two it may be borne; but to hold out an entire hour is more than human fortitude is capable of. A bit is thrown to the poor dog that looks so very hungry; it is eaten quickly, and then the eyes are at work again. Perhaps the other end of the board is tried, and the appeal

is enforced with the supplicatory whine that seldom fails. Piece after piece is thereby extracted; and dogs fed in this fashion will eat much more than if the whole were placed before them at one time. The animal becomes enormously fat, and then one day is found by the mistress with its legs dragging after it. The lady inquires which of the servants have been squeezing the dog in the door. All deny that they have been so amusing themselves, and every one protests that she had not heard poor Fanny cry. The mistress' wrath is by no means allayed. Servants are so careless—such abominable liars—and the poor dog was no favorite down stairs. Thereupon Fanny is wrapped in a couple of shawls, and despatched to the nearest veterinary surgeon.

If the gentleman who may be consulted knows his business, he returns for answer, "The dog is too fat," and must for the future be fed more sparingly—that it has been squeezed in no door—that none of the vertebrae are injured, but the animal is suffering from an attack of paralysis. He sends some physic to be given, and some embrocation to rub on the back. The mistress is by no means satisfied. She protests the man's a fool—declares she alone knows the truth—but, despite her knowledge, does as the veterinary surgeon ordered. Under the treatment the dog recovers; after which every one feeds it, and everybody accuses the other of doing that which the doctor said was not to be done. At length the animal has a second visitation, which is more slowly removed than was the first; but it at last yields; till the

third attack comes, with which the poor beast is generally destroyed as incurable.

These dogs, when brought to us, usually appear easy and well to do in the world. The coats are sleek; their eyes are placid; and the extremities alone want motion, which rather seems to surprise the animal than to occasion it any immediate suffering. They have no other obvious disease; but the malignity of their ailments seems fixed or concentrated on the affection which is present. The first attack is soon conquered. A few cathartic pills, followed by castor-oil, prepared as recommended in this work (page 116), will soon unload the bowels, and clear out the digestive canal. They must be continued until, and after, the paralysis has departed. At the same time, some stimulating embrocation must be employed to the back, belly, and hind-legs, which must be well rubbed with it four times daily, or the oftener the better. Soap liniment, as used by Veterinarians, rendered more stimulating by an additional quantity of liquor ammoniæ, will answer very well; more good being done by the friction than by the agent employed. The chief benefit sought by the rubbing, is to restore the circulation, and so bring back feeling with motion, for both are lost; a pin run into the legs produces no effort to retract the limb, nor any sign of pain.

The cure is certain,—and so is the second attack, if the feeding be persisted in; unless nature seeks and finds relief in skin disease, canker, piles, or one of the many consequences induced by over-feeding. The second

attack mostly yields to treatment. The third is less certain, and so is each following visitation ; the chances of restoration being remote, just in proportion as the assault is removed from the original affliction.

DISEASES ATTENDANT ON DISORDERED BOWELS.

RHEUMATISM.

It appears almost laughable to talk about a rheumatic dog ; but, in fact, the animal suffers quite as, or even more acutely than the human patient, and both from the same cause—



ACUTE RHEUMATISM.

over-indulgence ; still with this difference—the man usually suffers from attachment to the bottle ; the dog endures its misery from devotion to roaming under the table. It is not an uncommon sight to behold an animal so fat that it can hardly waddle, without scruple enjoying its five meals a day ; which it takes with a bloated mistress, who, according to her own account, is kept alive with the utmost difficulty by eating little and often.

The dog, I say, looks for its lady's tray with regularity, besides having its own personal meal, and a bone or two to indulge any odd craving between whiles. These spoiled animals are, for the most part, old and bad tempered. They would bite, but they have no teeth, and yet they will wrathfully mumble the hand they are unable to injure; while the doting mistress, in alarm for her favorite, sits upon the sofa entreating the beast may not be hurt: begging for pity, as though it were for her own life she were pleading. The animal during this is being followed from under table to chair, growling and barking all the time; and showing every disposition, if it had but ability, to do you some grievous bodily harm. At length, after a chase that has nearly caused the fond mistress to faint and you to exhaust all patience, the poor brute is overtaken and caught; but no sooner does your hand touch the miserable beast, than it sets up a howl fit to alarm the neighborhood. On this the hand is moved from the neck to the belly, intending to raise the dog from the ground; but the howl thereon is changed to a positive scream, when the mistress starts up, declaring she can bear no more. On this you desist, to ask a few questions: "The dog has often called out in that manner?" "O yes." "And has done so, no one being near or touching it?" "O yes, when quite alone." Thereupon you request the mistress to call the animal to her; and it waddles across the carpet, every member stiff, its back arched, and its neck set, but the eye fixed upon the person who has been called in.

You get the mistress to take the favorite upon her lap, and request she will oblige you by pinching the skin. "Oh, harder; pray, a little harder, madam!" Nevertheless, all your entreaties cannot move the kind mistress to do that which she fears will pain her pet; whereon you request permission to be permitted to make a trial; and it being granted, you seize the coat, and give the animal one of the hardest pinches of which your forefinger and thumb, compressed with all your might, are capable. The animal turns its head round and licks your hand, to reward the polite attention, and solicits a continuance of your favors. The skin is thick and insensible. What teeth remain, are covered with tartar, and the breath smells like a pestilence.

The dog is taken home, and an allowance of wholesome rice and gravy placed before it, with one ounce of meat by weight. The flesh is greedily devoured, but the other mess remains untouched. The next day the untouched portion is removed, and fresh supplied; also the same meat as before, which is consumed ere the hand which presented the morsel is retracted, the head being raised to ask for more.

The second day, however, the gravy and rice are eaten, and the meat on the morrow is deficient; gravy and rice for the future constituting the animal's fare. Then, for physic, an embrocation containing one-third of turpentine is used thrice daily, to rub the animal's back, neck, and belly with. Some of the cathartic pills are given over night, with the castor-oil mixture in the morn-

ing. Constant purgation is judiciously kept up, and before the first fortnight expires, the dog ceases to howl. Then the pills and mixture are given every other night, and the quantity of turpentine in the embrocation increased to one-half, the other ingredients being of the same amount. This rubbed in as before, evidently annoys the animal, and on that account is used only twice a-day. When all signs of pain are gone, the turpentine is then lowered to one-third, the embrocation being applied only once a-day, because it now gives actual pain. Some liniment, however, is continued, generally making the poor beast howl whenever it is administered. At the expiration of a month, all treatment is abandoned for a week, that the skin may get rid of its scurf, and you may perceive the effect of the treatment you have pursued. If the skin then appears thin, especially on the neck and near the tail, being also sensitive, clean the teeth, and send the dog home with a bottle of cleansing fluid, a tooth-brush, (as before explained,) and strict injunctions with regard to diet.

EMBROCATION (FIRST STRENGTH) FOR RHEUMATISM.

Turpentine	} One part of each.
Laudanum	
Soap liniment	
Tincture of capsicums	A little.

The subsequent strength is made by increasing the quantity of turpentine.

THE RECTUM.

PILES.—The dog is very subject to these annoyances in all their various forms ; for the posterior intestine of the animal seems to be peculiarly susceptible of disease. When enteritis exists the rectum never escapes, but is very frequently the seat of the most virulent malice of the disorder. There are reasons why such should be the case. The dog has but a small apology for what should be a cæcum, and the colon I assume to be entirely wanting. The guts, which in the horse are largest, in the canine species are not characterised by any difference of bulk ; and however compact may be the food on which the dog subsists, nevertheless a proportionate quantity of its substance must be voided. If the excrement be less than in beasts of herbivorous natures, yet there being but one small receptacle in which it can be retained, the effects upon that receptacle are more concentrated, and the consequences therefore are very much more violent. The dung of the horse and ox is naturally moist, and only during disease is it ever in a contrary condition. Costiveness is nearly always in some degree present in the dog. During health the animal's bowels are never relaxed ; but the violent straining it habitually employs to expel its fæces would alone suggest the injury to which the rectum is exposed, even if the inclination to swallow substances which in their passage are likely to cause excoriation did not exist. The grit, dirt, bone, and filth that dogs will, spite of every precaution, manage to

obtain, must be frequent sources of piles, which without such instigation would frequently appear. Bones, which people carelessly conclude the dog should consume, it can in some measure digest ; but it can do this only partially when in vigorous health. Should the body be delicate, such substances pass through it hardly affected by the powers of assimilation ; they become sharp and hard projections when surrounded by, and fixed in the firm mass, which is characteristic of the excrement of the dog. A pointed piece of bone, projecting from an almost solid body, is nearly certain to lacerate the tender and soft membrane over which it would have to be propelled ; and though, as I have said, strong and vigorous dogs can eat almost with impunity, and extract considerable nourishment from bones, nevertheless they do not constitute a proper food for these animals at any time. When the system is debilitated, the digestion is always feeble ; and, under some conditions of disease, I have taken from the stomachs of dogs after death, in an unaltered state, meat, which had been swallowed two days prior to death. It had been eaten and had been retained for at least forty-eight hours, but all the functions had been paralyzed, and it continued unchanged. If such a thing be possible under any circumstances, then in the fact there is sufficient reason why people should be more cautious in the mode of feeding these creatures ; for I have extracted from the rectums of dogs large quantities of trash, such as hardened masses of comminuted bones and of cocoanut, which, because the animal would eat it, the owners

thought it to be incapable of doing harm. Nature has not fitted the dog to thrive upon many substances ; certain vegetables afford it wholesome nourishment, but a large share of that which is either wantonly or ignorantly given as food, is neither nutritive nor harmless. Whatever injures the digestion, from the disposition of the rectum to sympathise in all disorders of the great mucous track, is likely to induce piles ; and the anus of the animal is often as indicative of the general state of the body as is the tongue of man.

In perfect health the anus should be small, firm, close, and entirely retracted ; especially should it be cleanly. Any soil upon the part, or any excrement adhering to the hair about its margin, is indicative of derangement. If the fundament protrudes, so that it can be grasped by the finger and thumb, or if it presents a sensible projection to the touch, the digestion is not sound. The indication is still worse when the orifice is enlarged—the edges not being inflamed, which indeed they seldom are, but swollen, loose, coarse, creased, and unsightly. This state will not continue long before cracks and ulcers may be detected upon the borders of the opening, which ultimately is constantly moistened by an unctuous and peculiarly fetid discharge. If the lips of the orifice be gently pulled aside, the more inward portion of the membrane will frequently be seen of a bright scarlet color, and wet with a watery fluid, but the anus is rarely of so deep a tint, the hue being, even in aggravated cases, only a pale reddish brown.

To correct this state of disease, the first thing to be attended to is the food. The diet must be strictly regulated; it should not be too much reduced either in quantity or quality, for dogs in this state are generally old, and always weakly. Enough of good food should be allowed, but nothing more ought to be given. Meat, lean, and from a healthy animal, as constituting the lightest and most nourishing diet, will here be best, and from two ounces to two pounds may be divided into four meals, and given in the course of the day. Plenty of exercise and a daily cold bath will likewise be beneficial.

Medicine must be employed for two purposes; the first, to alleviate the pain and act locally on the disease; and the second, to amend the general health, checking the constitutional disposition to be affected. As a local application, Mr. Blaine recommends an ointment; which I object to, because I have found it aggravate the suffering without conferring any compensating benefit. Astringents, such as the acetate of lead, are not curative; but the following ointment has done so much good in these cases that I can most confidently submit it to the public:—

Camphor	Two drachms.
Strong mercurial ointment .	One drachm.
Elder ointment	One ounce.

The only addition I make to the above is occasionally a drachm of powdered opium. This is smeared over the

exterior of, and also inserted up, the rectum, thrice in the day. A piece of wood nicely rounded, or a penholder if the animal be small, answers very well to introduce the salve into the gut; and of course it should be done with every consideration, for the pain it will at first produce. The resistance is often strong, and the cries violent; for in some cases the rectum is so sensitive that the mere lifting of the tail cannot be silently endured. The poor dog seems in constant agony; for I have known the exclamations to be provoked by simply looking at the part, and the animal evidently shrieked from the idea of it being touched. All possible tenderness, therefore, is required; and the dog should be very firmly held, to prevent its contortions from adding to its anguish. When the ointment is regularly and properly employed, the relief is generally speedy; and after the third day the dog, which had been so energetically resistful, often submits to be dressed without a murmur. The cessation of the howling will indicate the progress of the cure, but the application should be used for some days after the animal becomes silent. If much stench is present, the fundament may be at each dressing moistened with very dilute solution of the chloride of zinc, and a small quantity may be administered as an injection, after the grease has been introduced.

The constitutional remedies must be regulated by the symptoms, and nothing absolute can be said on this subject; but in the great majority of instances tonics will be required. Purgatives are not often needed, but a day's

feed of liver once or twice a week will do no harm. Should it not have the desired effect, a little olive oil may be given; but nothing stronger ought to be risked, and above all, no preparation of mercury—which, in the dog, specially acts upon the rectum—ought on any account to be permitted.

Piles, if not attended to, become causes of further disease, which may in some cases prove fatal, though in the larger number of instances they are far more distressing than dangerous.

A sero-sanguineous abscess, that is, a tumor consisting of a single sac or numerous small bladders, containing a thin and bloody fluid, is by no means a rare accompaniment of long-continued piles. These mostly appear rather to one side of, and more below than above, the opening, the verge of which they always involve. They occasion little pain, and often grow to a comparatively enormous size; when they may burst and leave a ragged ulcer, which has little disposition to heal, and is not improved by the dog's drawing it along the ground.

When these are observed, the knife should not be too quickly resorted to. The abscess should be allowed to progress until it is fully matured, the dog being in the meantime treated for simple piles. When the tumor perceptibly fluctuates, it should be freely opened, the incision being made along its entire length. This is best done with one of Liston's knives, which should be thrust fairly through the swelling, entering at the top and coming out at the lowest part, when with one movement

of the wrist the substance is divided. The operation thus performed is much quicker, less painful, and more safe than it can possibly be rendered if the tumor be punctured and slit up with repeated thrusts of an ordinary lancet. I have frequently opened these sacs without the animal uttering even a moan, and mercy is wisdom where surgery is employed. Dogs will not bear torture, and soon become blindly infuriated if subjected to pain. The animal is naturally so sensitive and excitable that the brutality or suffering a horse can sustain, these animals would perish under. He, therefore, who undertakes to treat the diseases of the canine race, if the amiable qualities of the brute or his own feelings have no influence, will in the success of his practice discover ample reason for the exercise of a little humanity.

After the sac is opened a portion of lint should be used, to render the part perfectly dry, which may then be lightly pencilled over with lunar caustic, or moistened with some caustic solution. Fomentations of warm water to keep the wound free from dirt, and with no other object, are all that subsequently will be required.

Tumors of a solid nature also form about the anus, and are likewise consequent upon neglected piles. These generally appear at the root of the tail superior to the opening. They feel hard; are glistening; not very tender; but highly vascular, and in some cases pulsate strongly. The dog is generally loaded with fat, perhaps slightly mangy; nearly always old, gross and weak. The quantity of blood that at vari-

ous intervals is lost from this tumor, which at length ulcerates and bleeds at the slightest touch, or without any apparent cause, is often very great ; but it does not, save in the very latest stage, induce obvious emaciation. The health is not good, of course, but to the casual observer the disease does not appear to affect the system. The spirits under excitement are, to all appearances, undiminished, and the appetite is in these cases ravenous. If, however, the dog had to do work, the truth would be soon discovered. After a short space the strength would fail, and no correction could keep the poor animal to its duty.

The treatment must commence with constitutional remedies, if the state of the part permits of the requisite delay. The digestion should be amended, and the piles, which are certain to be present, attended to. After a fortnight, more or less, has been devoted to such measures, a strong ligature should be tied as tight up as possible around the base of the growth, and a fresh one should be applied every second day. There must be no forbearance in the application of the ligature, but the degree of tension must be regulated only by the strength of the operator. This is far more severe than the removal would be if the knife were employed, but I have not seen a case which I dared venture to excise. I do not like the ligature ; it is long and torturing in its action ; but here there will be no chance, for the vessels are too numerous and large to admit of the speedier process being resorted to. Where it is possible, it is

well, however, to cut through the skin before applying the cord ; for the operation is expedited considerably, and an important deduction made from the animal's agony.

When the tumor drops off, the surface may be sprinkled thrice a day with the following powder :—

Camphor in powder,
Opium in powder,
Grey powder,
Powdered galls, of each an equal quantity.

Or a little of the ointment recommended for piles may be smeared upon the wound in lieu of the above. An unguent is perhaps to be preferred, as giving better protection to the sore, over which the fæces must pass, and also as being more grateful to the feelings of the patient. Powder and ointment may be changed and varied according to the judgment of the attendant : thus, to render the last more stimulating, I mix creosote with it occasionally ; or to give it an astringent property I add a portion of galls, catechu, or kino ; but these I never pass into the rectum. Astringents introduced upon the sore and ulcerated surface of the intestine of course render it harsh, dry, and corrugated ; and as during the exercise of its function the part is necessarily dilated, the animal is, by the pain produced from the stretching of the constringed membrane, indisposed for the performance of that act, on the regular discharge of which its health in no little measure depends. Astrin-

gents, moreover, heat and irritate the part; and the sensations induced make the dog draw its anus along the ground, thereby adding greatly to the evil it is the intention of the application to remove. Therefore prudence will approve what humanity suggests; and those who in kindly feeling can discover no motive, will in the colder reason find every inducement for the adoption of the gentler measure.

Protrusion of the rectum is also sometimes a consequence of gross feeding, starting up piles in the first instance, and then, from more intense digestive derangement, causing purgation, accompanied with violent straining. The tone of the intestine is destroyed. It becomes lax, and its muscular power is lost. The gut is at first only a little exposed during the act, and when that is over, it is retracted; but after some time, the limit of which is uncertain, it remains constantly protruded. It is not so violently inflamed as might be expected, but it soon gets dry and harsh; cracks appear upon its surface; and the pressure of the muscle which closes the anus preventing the free circulation of the blood, renders it black from congestion.

If taken early, the treatment recommended for piles will generally effect a cure; but if nothing be done in the first instance, the disease when established is apt to prove intractable. The intestine should be sopped with cold water until every particle of dirt is removed. It should then be dried with a soft cloth, and afterwards returned. There is never much difficulty in replacing

the gut ; but there is always considerable difficulty to get it to be retained. So soon as it is restored to its situation, a human stomach pump should be inserted up the rectum, and a full stream of the coldest spring water should be thrown into the bowel for ten minutes. The fluid will be returned so fast as it enters, and it must be allowed to do so, the fingers of one hand being employed against the anus to prevent the disordered rectum being ejected with the water. Cold injection in less quantity must be administered several times during the day, and with each a little of the tincture of galls, or of nux vomica, in the proportion of a drachm to a pint, may be united. The ointment recommended for piles may also be employed, but without opium, for no application of a sedative nature must be used. The constitutional measures will consist of tonics into which nux vomica enters. The food must be light and nourishing, and purgatives on no account must be administered. Cold will do good by invigorating the system, and should always be recommended. Some persons, unable by sedatives and purgatives, which are injurious, to obtain relief, have gone so far as to cut off the projecting bowel, and they have thereby certainly ended the case ; for the dog dies whenever this is done. I remember at the Veterinary College, Professor Simonds killed a fine animal by attempting this operation ; for he took a heated spatula to remove the part, and carried the incision so high up that he opened the abdomen, and the bowels protruded from the anus. Amputation of any portion of the rectum is

not to be thought of; but an operation of a less heroic description will sometimes accomplish what the previous measures failed to effect. With a knife, having not too sharp but a coarse edge, a circular portion of the exposed lining membrane, of a width proportioned to the size of the animal, may be scraped off, so as to induce a cicatrix; or, if the dog be very tractable, and the operator skilful, a piece of it may partially be dissected off; but the knife, when employed in the last method, is apt to cause alarming hemorrhage. When this is done, as the wound heals the edges come together, and the gut is so far shortened as to be thereby retracted. There is, however, some danger of stricture being afterwards established; wherefore this operation, however satisfactory it may seem to be in the first instance, is not so certain in the benefit of its results that it should be resorted to, save in extreme cases when every other means have failed, and the choice at last hangs between relief and destruction.

Another affection of the part, to which Scotch terriers of great size are particularly subject, begins with an enlargement below the anus, extending either quite or almost to the testicles; for males are more frequently attacked by this form of disease than females. The dog is generally old, and a favorite with an indulgent mistress, having much to eat, and little or no work to do. The swelling is soft and attended with no pain. On pressure and on percussion it is ascertained to hold fluid, and in fact it arises from dropsy of the perinæum. The

health may appear to be good, but on examination debility will be found to be present. The anus also protrudes, and the orifice is thickened ; while, possibly, a marked tendency to piles may at the same time be displayed. Should no attention be paid to the case, the swelling will continue without sensibly enlarging ; but after a period, hard substances may with the fingers be detected beneath it. These hard bodies are fæces, which accumulate within the rectum, and often in so great a quantity as to seriously inconvenience the animal, rendering it dull and indisposed to feed.

Before attempting to direct the treatment for these cases, it is necessary the nature of the affection should be fully explained. The enlargement, to which attention is at first solely directed, is always of secondary consideration. The dropsy is merely a symptom indicative of the loss of tone of the adjacent parts, of which the rectum is by far the most important. If this circumstance be not observed, but the swelling be treated as if it was all the practitioner had to contend with, he will in the end learn his mistake. The intestine loses its tonicity ; it no longer has power to contract upon or to expel its contents ; it becomes paralysed, and the dung consequently accumulates within it, distending it, and adding to its weakness by constant tension. The rectum at length retains no ability to perform its function ; but the sphincter of the anus, or the circular muscle that closes the opening, appears to gain the strength of which the intestine is deprived. It contracts, and thus shuts up the

fæces which the rectum cannot make an effort to dislodge ; and in this circumstance the physiologist sees evidence of the sources whence the different parts derive their contractility. The rectum, like the other intestines, gains its vital power from the sympathetic nerve, or that nerve of nutrition and secretion which presides over organic life. The muscle of the anus, on the other hand, is influenced by nerves derived from the spinal column ; and thus, understanding the two parts obtain their motor power from different sources, the reader will comprehend how one can be incapable of motion while the other is unaffected, or rather excited ; for the presence of the retained dung acts as an irritant, and provokes the anus to contract with more than usual vigor.

If nothing be done to restore the balance of power, the rectum speedily is so much distended that its walls become attenuated, and then a cure is hopeless ; a sac is formed, and the gut is not only much stretched or enlarged, but it is also, by the excessive bulk of its contents, forced from its natural position, being carried either to one side or the other, but always to where the dropsy is most conspicuous.

In such cases, when the dropsy is first observed, our care must be to invigorate the system. Small doses of *nux vomica*, with iron, gentian and capsicums, made into a pill, will generally do this, and the following form may be employed :—

<i>Nux vomica</i> , in powder. . .	Five grains to a scruple.
<i>Capsicums</i> , in powder . . .	Ten grains to two scruples.

Sulphate of iron	One to four scruples.
Extract of gentian	Two drachms to one ounce.
Cinchona powder	A sufficiency.

Make into twenty pills, and give four in the course of the day. The liver is too often at this time unhealthy, and to correct it the subjoined may be administered :—

Iodide of potassium	One drachm.
Liquor potassæ	Two ounces.
Simple syrup	Five ounces.
Water	A pint.

Dose, from a tea-spoon to a table-spoonful three times a day. The food should be chiefly vegetables, or at all events only so much meat should be allowed as is required to induce the dog to eat the mess of boiled rice. Exercise is also essential, and a daily cold bath with a brisk run afterwards, will be of service. The dog will likewise be benefited if his skin be well brushed every morning; and perhaps it is hardly necessary to state that any symptoms denoting mange or skin disease, canker, &c., should be specially counteracted.

Hitherto, however, nothing has been said about any treatment of the part which is the immediate seat of the disease. If the fluid poured into the perinæum be excessive, the part must be laid freely open by two or three incisions being made along the entire length of the swelling. After this has been done, the liquid will not escape as from an abscess; for being held within the cells of the membrane, that lies immediately under the skin,

comparatively little of it is released from the knife. A fine pair of scissors will be required to snip the separate bags or bladders; but that operation must be performed with caution, else injury may possibly be done. The business being concluded, let the parts be afterwards dressed with the tincture of iodine, or a tincture of the iodide of potassium, of the strength of a drachm to the ounce of proof spirit; this being preferable to water for a solution in these cases. Into the rectum also injections should be thrown at least three times a day, and all of these ought to be of a tonic and stimulating kind, being used perfectly cold. Either of the following may be administered:—

1.

Tincture of cantharides . . .	One drachm.
Camphor mixture	One pint.

2.

Tincture of nux vomica . . .	One drachm.
Tincture of tolu	One drachm.
Water	One pint.

3.

Tincture of cubebs	One drachm.
Liquor potassæ	One drachm.
Camphor mixture	One pint.

4.

Solution of nitrate of silver .	One drachm.
Distilled water	One pint.

Any of the above may be employed, from a table-spoonful to a common wine-glass full being used for a

dose. The pile ointment will likewise be beneficial, by facilitating the passage of the fæces, allaying local irritability, and correcting that tendency to piles which is generally attendant upon, if not the original cause of the affection.

From what has been described, the reader will have seen that the diseases of the dog's rectum are neither few nor insignificant. Fistula in ano is said to be often beheld ; but I have never seen a case in which it assumed in the dog that serious form which characterises it in man. In the canine race I have mostly let it alone, and hitherto I have had no reason to repent my forbearance. Blaine and Youatt both speak of the affection, and give directions for its treatment by operation. The most active remedy I have found it necessary to resort to has been an astringent or mildly caustic injection ; the solution of the chloride of zinc I prefer to every other, but the sulphates are also not to be despised. Injections, when not designed to be immediately operative, or meant to distend the gut and to act through being ejected, are best given by means of the India-rubber bladder, which allows the fluid to be more gently and silently thrown up. The less noise or force attending the operation the less likely is the animal to be alarmed or excited, and the probability is the enema will be retained. Small quantities are to be administered when the fluid is wished to remain ; and by attracting the attention of the dog at the time, and amusing him after the business is finished, the object in view is considerably favored. The adminis-

tration of an injection is in the first instance almost certain to alarm the animal, who can neither understand nor passively sanction the strange liberty the operation implies. A little soothing, however, will restore his confidence, and he who has gained the trust of a dog, may subsequently do as he pleases with the body of the generous and confiding beast.

NERVOUS DISEASES.—FITS IN THE DOG.

YOUATT speaks of fits as particularly fatal to the dog, saying they “kill more than all the other diseases put together.” The experience of this esteemed authority is in direct variance with my own—save from distemper. When the fits occur in that disease they are mostly fatal, being the wind-up of all the many evils which the malady in its most intense and malignant form can accumulate on one doomed life—I have not otherwise found them especially troublesome.

Fainting fits require little attention; if the dog be left quiet, it will in due time often recover without medicine.

Puerperal, or rather pupping fits, are treated of in their fitting place, and, if properly administered to, are by no means dangerous.

Fits *par excellence* are witnessed when a dog is taking a long walk with its master; the animal at first lingers behind, or gets a long distance before the proprietor, who notices the fact, but contents himself with whistling and

walking forward. The dog does not obey the mandate ; it is standing still as if stupefied ; suddenly it emits a strange, loud, guttural sound, and then falls upon its side, continuing to cry, but more feebly and more naturally ; its fæces and urine may be discharged involuntarily ; it will bite any one who, during the existence of the attack, incautiously attempts to lay hold of it ; its limbs, at first stretched rigidly out, are ultimately, with returning volition, put into violent motion ; the eye is protruded and foam covers the mouth. When the convulsion has subsided, the dog raises its head and stares about ; after which it would, if left alone, start at its utmost pace, and run heaven only knows where. Should idle men and foolish boys behold a dog wildly run onward after having come out of a fit, and raise the cry of "mad dog," the fate of the poor animal is then sealed, as fear is devoid of discrimination or pity. Half the dogs killed as rabid are those in this condition, scampering under the impulse of returning sensation.

The first thing any person is to do when out with a dog which has a fit is to secure the animal, and to prevent its running away when the fit has passed. The second thing is stubbornly to close his ears to the crowd who are certain to surround him. No matter what advice may be given, he is to do nothing but get the animal home as quickly as possible. He is neither to lance the mouth, slit the ear, nor cut a piece of the tail off. He is on no account to administer a full dose of salt and water, a lump of tobacco, or to throw the animal into an adja-

cent pond ; and of all things he is to allow no man more acquainted with dogs than the other spectators to bleed the creature. Any offer to rub the nose with syrup of buckthorn, however confidently he who makes the proposal may recommend that energetic mode of treatment, is to be unhesitatingly declined. The friendly desire of any one who may express his willingness to ram a secret and choice specific down the prostrate animal's throat, must be refused with firmness. The attendant must however take advantage of the time the dog is on the ground to pass a handkerchief round the neck or through the collar. This done, he must wait patiently till the dog gets upon its legs, when he must, amidst its struggles to be free, caress it and call it kindly by its name. That part of the business over, he must take the creature in his arms, and seeking the nearest cab-stand, carry the poor animal with all expedition homeward.

I have known a dog to have a succession of fits which lasted more than an hour ; and yet this creature, by the treatment I shall presently describe, was the next day upon its legs, and to all appearance as well as ever.

The dog being brought home, if the fit continues, give nothing by the mouth ; because the animal being insensible cannot swallow ; and the breathing being laborious, anything administered is more likely to be drawn on to the lungs, and so to suffocate the creature, than to pass into the stomach, and thus (if it have any curative properties) effect a restoration. On this account the very best physic ever invented would be dangerous, and

should be withheld. Enemas are the only things in these cases to be depended upon; and the best the author is at present acquainted with, is made of 1, 2, or 3 drachms of sulphuric æther, and 2, 4, or 6 scruples of laudanum to $1\frac{1}{2}$, 3, or $4\frac{1}{2}$ ounces of the very coldest spring water that can be obtained. The above injection having been administered, the dog is left entirely by itself, and, as far as possible, in absolute silence for an hour; at the expiration of which time, in whatever state the animal may be in, another dose is given in the same manner as before.

There is no limitation to the quantity which may be administered; the only sign the attendant accepts that the creature has received sufficient is the sight of it coiled up as though it were composing itself to sleep, when he gives one more injection, and leaves the dog to recover at leisure, but in perfect stillness.

So valuable is this medicine in cases of fits that I have known it to cut them short as with a knife; literally to let the first part of the fit be heard, but to check the attack before the last and worst portion could put in an appearance.

Armed with this medicine I fearlessly face the disorder, which other veterinary surgeons dread; and, whether it be my good luck or no, cannot be decided, but I have not, under its operation, lost a single case.

Fits in my opinion are, in the great majority of cases, to be traced to the quantity or quality of the food consumed. In proof of this, dogs have had fits whenever

flesh has been given ; which ceased on this kind of diet being withheld, and medicine calculated to restore the tone of the stomach being ordered. In every case of fits, when the attack is over, I attend to the stomach ; at the same time, ordering that the dog is to go short distances, and never to leave the house without a chain and collar.

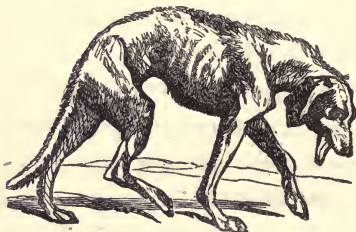
The object of this last injunction is to prevent the animal running about, and thus heating itself, or causing a flow of blood to the brain.

It is to be lamented that the crowd of people prevents an injection being administered out of doors in London : but the same objection does not apply to the country ; and as the effects of the æther are more marked in proportion as it is quickly exhibited, persons in the country, when, during the hot months of summer, they take dogs for an airing, should be provided with the materials necessary to render fits, if not harmless, at all events less fatal.

NERVOUS SYSTEM.—RABIES.

THE dog is naturally the most nervous of all the dumb tribe. His intense affection, his ever-watchful jealousy, his method of attack, the blindness of his rage, and his insensibility to consequences, all bespeak a creature whose nervous system is developed in the highest possible degree. I myself once had a little cur, who, as I sat reading, would enter the apartment, jump upon my knee, uttering a low whimper all the time, creep along my

waistcoat, rub his little body against my head and face, lick the hand lifted up to return his caresses, and then scamper off, and perhaps not come near me again the whole of that afternoon. What was this but an affectionate impulse seeking a nervous development? The way to manage an animal of this description is, to respect his evident excitability. The instant a dog appears to



A RABID DOG.

be getting excited, there should be a sign given, commanding a stop to be put to all further proceedings. If the respect of the animal be habitual, the person who mildly enforces it may enter a room, where the same dog is in a rabid state, and come forth unscathed.

I have hitherto been much among dogs, and, nevertheless, have almost escaped being bitten. The reason is, that I understand and respect the innate nervousness of the animal. When I go into a room, if there be a dog there and he growl, I speak kindly to him, and then seat myself, and bestow on him none of my attention for some time. My request to his master or mistress is, that he or she will not check or seek to stop the symptom of

his wrath ; but allow him to vent his rage until he is ashamed of it, and from a feeling of remorse is silent. When this takes place, and a sufficient time has passed to confirm him in the new mood into which he has recently entered, I approach him with my hand extended and open ; this I bring near to him by degrees, avoiding all sudden movements or anything that might provoke his natural disposition. Generally he crouches, then I speak to him in tones of encouragement. If he display a return of his warlike propensity, I still bring the hand nearer and nearer to him, telling him to bite it if he pleases, if he is not ashamed to injure that which means to do him good. Then, perhaps, he will make a snap at my extended hand, which is not upon this withdrawn, or the jaws would close with nervous violence, but allowed to remain, and the teeth are felt to touch the skin without wounding it. I allow him to hold the hand for any length of time he pleases, telling him. " he would lose his character if he were to harm it. That he is a courageous dog, and means no hurt ; he would be ashamed to bite." And with this kind of speech, which the animal may not literally understand, but the sense and purpose of which it nevertheless appears to comprehend, I seldom fail of getting my hand safe and sound from the creature's jaws.. After that I may pat him, for an intimacy has begun. He allows me to drag him forth, take him on my knees, and permits me any liberty I please to take. I do not attribute my escape to any charm that I possess ; but account for it simply

by my knowing and respecting the natural temperament of the beast with which I have to interfere.

This natural respect for the feelings of a most affectionate creature, with such a power of observation as will enable the individual to recognise the presence of lamentable sickness in an animal that has with truth been called "the companion of the home," shall at all times enable the uneducated in such matters to recognise a mad dog, and, unless luck be dead against the individual, save him from being bitten.

It is no pleasure to a dog to go mad. Quite the reverse. Dreadful as hydrophobia may be to the human being, rabies is worse to the dog. It makes its approach more gradually. It lasts longer, and it is more intense while it endures. The dog that is going mad, feels unwell for a long time prior to the full development of the disease. He is very ill, but he does not know what ails him. He feels nasty; dissatisfied with everything; vexed without a reason; and, greatly against his better nature, very snappish. Feeling thus, he longs to avoid all annoyance by being alone. This makes him seem strange to those who are most accustomed to him.

The sensation induces him to seek solitude. But there is another reason which decides his choice of a resting-place. The light inflicts upon him intense agony. The sun is to him an instrument of torture, which he therefore studies to avoid, for his brain aches and feels as it were a trembling jelly. This induces the poor brute to find out the holes and corners where he is least likely to

be noticed, and into which the light is unable to enter. In solitude and darkness he passes his day. If his retreat be discovered and the master's voice bids him to come forth, the affectionate creature's countenance brightens ; his tail beats the ground, and he leaves his hiding-place, anxious to obey the loved authority ; but before he has gone half the distance, a kind of sensation comes over him, which produces an instantaneous change in his whole appearance. He seems to say to himself, " Why cannot you let me alone ? Go away. Do go away. You trouble, you pain me." And thereon he suddenly turns tail and darts back into his dark corner. If let alone, there he will remain ; perhaps frothing a little at the mouth, and drinking a great deal of water, but not issuing from his hiding-place to seek after food. His appetites are altered, hair, straw, dirt, filth, excrement, rags, tin shavings, stones, the most noisome and unnatural substances are then the delicacies for which the poor dog, changed by disease, longs, and swallows, in hope to ease a burning stomach. So anxious is he for liquids, and so depraved are his appetites, that no sooner has he passed a little urine than he turns round to lick it up. He is now altogether changed. Still he does not desire to bite mankind ; he rather endeavors to avoid society ; he takes long journeys of thirty or forty miles in extent, and lengthened by all kinds of accidents, to vent his restless desire for motion. When on these journeys he does not walk. This would be too formal and measured a pace for an animal whose whole frame quivers with excitement. He



A MAD DOG ON THE MARCH.

does not run. That would be too great an exertion for an animal whose body is the abode of a deadly sickness. He proceeds in a slouching manner, in a kind of trot; a movement neither run nor walk, and his aspect is dejected. His eyes do not glare and stare, but they are dull and retracted. His appearance is very characteristic, and if once seen, can never afterwards be mistaken. In this state he will travel the most dusty roads, his tongue hanging dry from his open mouth, from which, however, there drops no foam. His course is not straight. How could it be, since it is doubtful whether at this period he sees at all? His desire is to journey unnoticed. If no one notices him, he gladly passes by them. He is very ill. He cannot stay to bite. If, nevertheless, anything oppose his progress, he will, as if by impulse, snap—as a man in a similar state might strike, and tell the person “to get out of the way.” He may take his road across a field in which there are a flock of sheep. Could these creatures only make room for him, and stand

motionless, the dog would pass on and leave them behind uninjured. But they begin to run, and at the sound, the dog pricks up. His entire aspect changes. Rage takes possession of him. What made that noise? He pursues it with all the energy of madness. He flies at one, then at another. He does not mangle, nor is his bite, simply considered, terrible. He cannot pause to tear the creature he has caught. He snaps and then rushes onward, till, fairly exhausted and unable longer to follow, he sinks down, and the sheep pass forward to be no more molested. He may have bitten twenty or thirty in his mad onslaught; and would have worried more had his strength lasted, for the furor of madness then had possession of him.

He may be slain while on these excursions; but if he escapes he returns home and seeks the darkness and quiet of his former abode. His thirst increases; but with it comes the swelling of the throat. He will plunge his head into water, so ravenous is his desire; but not a drop of the liquid can he swallow, though its surface is covered with bubbles in consequence of the efforts he makes to gulp the smallest quantity. The throat is enlarged to that extent which will permit nothing to pass. He is the victim of the most horrible inflammation of the stomach, and the most intense inflammation of the bowels. His state of suffering is most pitiable. He has lost all self-reliance; even feeling is gone. He flies at and pulls to pieces anything that is within his reach. One animal in this condition, being confined near a fire,

flew at the burning mass, pulled out the live coals, and in his fury scrunched them. He emits the most hideous cries. The noise he makes is incessant and peculiar. It begins as a bark, which sound, being too torturing to be continued, is quickly changed to a howl, which is suddenly cut short in the middle ; and so the poor wretch at last falls, fairly worn out by a terrible disease.

But now comes the question, How do we know that rabies is a nervous disease ? Why, the whole course of the disorder declares it, or if that be not thought sufficient, the dog at one stage very distinctly announces it. He may be sitting down, an unwilling listener to his master's voice, when the brute's eyes will wander ; and at length fix themselves upon some object at a distance, which it will keep watching, crouching down as the horror seems, to the excited brain of the poor beast, to draw near ; till, having apparently come within bounds, the hateful presence is no longer to be endured, and the vision-haunted animal dashes forward with a howl of execration, as if to seize and tear the terrible spectre. This action being performed, and the dog biting the air, he stands for a moment, shivers, looks stupidly around him, and slinks back. What is this but a power of seeing visions depending on a disordered brain, or positive delirium exemplified by a dumb creature ? And the same piece of pantomime the dog may go through fifty times in an hour. No disappointment can teach him ; and experience is lost upon the animal that in his sane state was so quick to learn.

Youatt mentions as a symptom, that the dog in all he does is instigated by the spirit of mischief or of malice,—that he desires to do injury, and is prompted by malice in all his acts. This, to an outward observer, will appear a correct judgment; but it is essentially wrong. It is the conclusion reached by one who judges mainly of exteriors; it can be true only to those who are willing to look no deeper than the surface. There can be no malice in a raging fever, which vents itself on every object within its reach, animate or inanimate. Mischief is too playful a term to apply to a consuming wrath that ultimately destroys the life. All pain is lost; as a consequence all fear is gone. The poor beast is urged by some power too mighty for its control, which lashes it on beyond all earthly restraint to pull to pieces, to gnaw, and to attempt to eat every object it can get at; but how far it is urged by malice or mischief, the following anecdote will serve to show:—

A butcher had a large bull mastiff of which he was very fond; but, observing something very strange in his pet's behavior, he came to consult the author about the dog. The man was told to bring the animal for inspection early the same evening. This order was given from no suspicion of the truth, for the owner's description was too confused to be rightly interpreted. The animal was accordingly brought punctual to time, led through the streets by a silk handkerchief carelessly tied round the neck of the beast. The author being at the exact moment of the dog's arrival, fortunately, engaged, the butcher had

to wait some few minutes, during which time the writer's eyes were kept upon the huge creature. It was remarked to look round in a strange manner. The eye was retracted and the nose dry. It was at length seen to put its mouth against its master's boot, continue in that position uttering a strange noise, and to move its jaws as if biting at some substance. The butcher all this time stood perfectly still, allowing his favorite to follow the bent of its inclination without rebuke or opposition. When the mastiff's head was removed, the boot it had apparently been biting was perfectly dry. The author observed nothing more than this; but, afraid to confess his dread, lest the cry of mad dog should be raised, and do more, much more, harm than good, he called to the butcher, telling him he was going abroad shortly, and would call upon him. In the mean time, he was to take the dog home, place it where it could do no injury, and in a place whence there was no possibility of escape. The man touched his hair and retired.

No time elapsed before the author paid his promised visit; and when he did so, he was pleased to hear the dog was securely confined in that which ought to have been the front kitchen of the house in which the butcher resided. To this spot the man led the way, and was about fearlessly to open the door, when he was entreated to stay his hand. The author listened at the closed entrance, and from the interior there soon came forth sounds that left no doubt of the poor creature's real condition. The butcher was thereupon informed that his

dog was mad. The man was at first wholly incredulous ; whereon the writer requested him to look through a chink, and say how the animal was employed. " He is tearing a piece of wood to pieces, and munching it as though he were very hungry. Poor thing, I must go to him ! He has taken no victuals or drink these three days." The author interposed, to prevent the master from fulfilling his humane suggestion. With much difficulty he was persuaded to wait the turn of events, and not to unloose the door that night. The next morning the butcher was thoroughly convinced. Neither he nor his family had been able to get any rest on account of the dog's cries ; and before that day expired, to anticipate the poor animal's fate, the unfortunate beast was shot.

In this case the dog exhibited no malice, neither did he appear to be prompted solely by mischief. When the muzzle was first lowered to the master's boot, the poor animal doubtless was moved to that action by the irresistible desire natural to the disease. The longing was to bite something, no matter what ; any object must be cooler than the heat that burnt within the wretched creature's throat and stomach. The teeth were impulsively prepared to bite, but between the desire and its consummation, reflection came. The affection natural to the dog acted as a restraint. It was unable entirely to destroy the prompting of disease, but it turned the bite which it was prepared to give into a mumble, and the loved master escaped unhurt.

There is also something which must not be quite overlooked in the habitual wanderings that, as the disease grows in virulence beyond the dog's control, causes the animal constantly to leave the home within which its attachment resides. There is something likewise in the disposition, which causes the poor beast to quit the society of all it loves ; and to leave the house in which those for whom its life would cheerfully be sacrificed dwell, to inhabit a dark and noisome corner. It is not mischief which makes the creature respond to its master's voice so long as memory has power—even after rabies has set in. There is no malice in the end of the disease ; it is blind and indiscriminate fury, which would much rather vent itself on things than upon beings—even finding an unholy pleasure in injuring itself by gnawing, biting, and tearing its own flesh ; and so truly is the fury *blind*, that most frequently the eyes ulcerate, the humors escape, and the rabid dog becomes actually sightless.

Of the causes or treatment of this disorder we know nothing ; neither are we likely to learn, when the nature of the disease is considered. The danger of the study must excuse our ignorance ; nor is this much to be regretted, since it is highly improbable that medicine could cure what is so deeply seated and universally present. The entire glandular structure seems to be in the highest degree inflamed ; and besides these, the brain, the organs of mastication, deglutition, digestion, nutrition, generation, and occasionally of respiration, are acutely involved. The entire animal is inflamed. Some except

from this category the muscular system; but such persons forget that paralysis of the hind extremities is often present during rabies. The body seems to be yielded up to the fury of the disease, and it obviously would be folly trying to cure a malady which has so many and such various organs for its prey. Neither are we better informed with regard to the causes which generate the disease. Hot weather has been imagined to influence its development; but this belief is denied, by the fact that mad dogs are quite as, if not more, frequent in winter than in summer. Abstinence from fluids has been thought to provoke it; but this circumstance will hardly account for its absence in the arid East, and its presence in a country so well watered as England, especially when the unscrupulous nature of the dog's appetite is considered. The French have been supposed to set this latter question at rest by a cruelty, miscalled an experiment. They obtained forty dogs, and withheld all drink from the unhappy beasts till they died. Not one of them, however, exhibited rabies, and by this the French philosophers think that they have demonstrated that the disorder is not caused by want of water. No such thing; they have proved only their want of feeling, and show nothing more than that one out of every forty dogs is not liable to be attacked with rabies. They have demonstrated that the utmost malice of the human being can be vented upon his poor dumb slave without exciting rabies. They have made plain that the poor dog can endure the most hellish torments the mind of

man can invent without displaying rabies. They have held themselves up to the world, and in their book have duly reported themselves as capable of perverting science to the most hideous abuses, and under its name contemplating acts and beholding sufferings at which the feelings of humanity recoil with disgust.

It is rarely that more than one mad dog appears at a time in England; so, to perfect their experiment, it would be requisite for the French philosophers to procure all the specimens of the canine species in this island, and doom them to torture; since, of the predisposing disposition or circumstances necessary to the development of this disease, man knows nothing. Ignorance is not to be concealed under the practices of barbarity.

Irritation or teasing, by exciting the nervous irritability of the dog, appears more likely than any physical want to excite rabies.

TETANUS.—I have witnessed no case of this description in the dog. Both Blaine and Youatt speak of tetanus as extremely rare in that animal; but both mention having encountered it, and that it was in every instance fatal. Since such is its termination, I am in no hurry to meet with it, and care not how long it remains a stranger to me. If any of my readers were to have a dog subject to this disease, the best treatment would be the application of ether internally as medicine, with slops or light puddings as food. The effects of the ether ought to be kept up for a considerable period at one time, and

recommenced so soon as the slightest trace of the disorder reappears.

GENERATIVE ORGANS.—MALE.

THESE parts in the dogs are liable to various diseases, among the most common of which is a thick discharge, either of pus or of impure mucus. Petted animals are very frequently thus affected, and are a source of annoyance to those who lap them. In this condition they also offend the ideas of propriety, by paying certain lingual attentions to themselves without regard to privacy. The favourite is for these things repeatedly chid and thrust from the knee ; but it cannot be instructed to forego the impulses of its nature, or of itself to restrain the symptoms of its affliction. Indeed, the dog is not to blame ; the fault lies with the owner.

The generative organs, in the male of the canine species, are peculiarly sympathetic with the digestive functions. This is so with man, but in the dog it is much more strongly marked. If a dog become from bad food affected with mange, canker, sore feet, &c., the part is never cleanly. When, however, the animal is fat and gross, though neither mange, canker, nor other disease be present, the organ may, nevertheless, be a source of painful irritation, and beyond a little thin fluid about the opening of the prepuce, there will be nothing to attract attention.

In such a case the discharge originally is thick and mattery. It accumulates upon the few hairs that fringe

the urinal orifice, and sometimes almost impedes the passage of the water. The symptom being neglected, the running becomes less consistent. The part is frequently erect, and the animal persists in licking it. The organ is now painful, and should be without delay attended to. If, however, no heed be taken of the creature's necessity, to which its instinct directs the proprietor's eye, swellings appear about the sheath, and blood is mingled with the exudation. Sores then appear externally, and the member becomes a mass of acute disease, often of a frightful character.

If, when the discharge first appears, the dog be taken on the knee, and its back being slightly bent, so as to bring the hind-legs forward—if, having the animal in this position, the sheath be retracted, so as to expose the glans, it is generally found to be inflamed. When the case is slight, the inflammation is confined to the base of the member, just around that part where the lining membrane is reflected upon the inner surface of the prepuce. As far back, therefore, as it can be exposed, a little redness may be discovered; but this will be so distributed as to convince us that the interior of the sheath is also involved. All the inflammation that can be detected will not be sufficient to account for the quantity of pus that is thrown out; and some persons have therefore allowed the disease to progress, imagining there was nothing present requiring to be treated. This is always a mistake. The lining membrane of the prepuce in these animals cannot be readily laid bare, and that part is

always the most seriously attacked. The penis during health ought to be moist and of a delicate flesh color ; it should not be wet, neither should it be in any degree red. The appearance ought to suggest the secluded situation to which the part is by nature assigned, and the sensitiveness with which it is endued. It should not denote uncleanness or anger ; but convey an idea of delicacy, and even beauty, to those who have good sense enough to appreciate nature's provisions.

When the want of early attention has allowed the structures to be seriously implicated, ulcers appear, which enlarge, and ultimately by uniting form a mass of sores. There is then often resistance exhibited when the part is touched, and cries declare the pain which pulling back the sheath occasions. The prepuce sometimes is not to be withdrawn, and the struggles of the animal are excessive when its retraction is attempted. There are then fungoid growths within, and the heat and tenderness denote the condition of the surface, which cannot without much violence be beheld.

All this suffering is to be traced to the misplaced kindness of the owner. Over-feeding is the cause ; and, so far as I know, the single cause which gives rise to the serious aspect of this form of disease. Should it accompany debility, it is mild in its character, and as the strength returns it will disappear. Even in this last case, however, it would be more certainly, and with more speed removed, by a few simple measures which necessitate no vast trouble.

In its mildest shape, any astringent eye-lotion will generally answer ; but the strength may with safety and advantage be increased.

1.

Sulphate of copper or zinc	. .	Five grains.
Distilled water	. . . . .	One ounce.

2.

Liquor plumbi	. . . . .	One drachm.
Distilled water	. . . . .	One ounce.

3.

Alum	. . . . .	Half a scruple.
Rose water	. . . . .	One ounce.

Either of the foregoing will be of service ; but before any of them, I prefer the subjoined :—

Chloride of zinc	. . . . .	One grain.
Distilled water	. . . . .	One ounce.

Whichever of the lotions the practitioner may prefer, should be used at least thrice daily, and if more frequently employed, no injury will be done. The mode of applying the lotion is extremely simple. The seat of the disease being exposed, with a piece of lint or soft rag the fluid is passed over the surface. No friction is resorted to ; but a simple bathing, in the gentlest possible manner, is all that can be required. In a few days the effect will be perceived, for by such means the affection can be cured ; but unless the food is improved, and the diges-

tion relieved, there can be no security against its speedy return.

Under its more virulent form it is not to be thus easily got rid of, though even then it is to be subdued. If there be much pain, I inject the lotion up the sheath, and by closing the orifice around the point of the syringe, endeavor to pass the fluid over the whole of the interior. Sometimes the pain or irritation is excessive : I then combine sedatives with the lotions, and their strength I increase as the occasion warrants ; but the non-professional person had better use none more potent than one drachm of tincture of opium to every ounce of lotion. When the pain, decreasing, allows the penis to be protruded, if any sprouting fungus or proud flesh is upon it, a pair of scissors should be used to snip it off. Some bleeding will ensue, but a little burnt alum will generally stay it ; though, if allowed to continue, I have thought the local depletion was beneficial, and it has never to my knowledge been attended with danger. The burnt alum I use in powder, and I prefer it in these cases to the lunar caustic ; which gives more pain ; acts less immediately as a styptic, and is not so satisfactory in its subsequent effects, and, as the animal can hardly be kept from licking the place, it may possibly be objectionable on that account. Such treatment usually is beneficial ; and the only further direction to be added concerns such minor points as reason probably would not need to have specially pointed out.

When the hairs at the orifice are matted together, it is

best to snip them away, which will not only remove a present inconvenience, but effectually prevent its recurrence. The wounds which occasionally cover the exterior of the sheath are of no vast importance, or, at all events, they are of secondary consideration. With the healing of the inward sores they mostly depart; but their disappearance will be hastened, and the comfort of the animal improved, if, when the injection is used, they are at the same time smeared with some mild ointment. That composed of camphor, &c., and to be found described at page 265, does very well for such a purpose; but any other of a gentle nature would probably answer as well.

Soreness of the scrotum is very common, and I have seen it in every description of dog. I attribute it to derangement of the digestion; never having witnessed it in animals that were not thus affected, and not having been able to discover it had any more immediate origin. It mostly appears first as a redness, which soon becomes covered with small pimples, that break and discharge a thin watery fluid. The fluid coagulates, and a thin scab covers the surface. The scab is generally detached, being retained only by the straggling hairs that grow upon the bag. The scab being removed, shows a moist and unhealthy patch, the margin of which is of a faint dirty red color.

This condition of the scrotum yields, in the first instance, to simple applications; but, should nothing be done, it will continue bad for some period, and may in-

volve the whole of the bag. It will, in most instances, so far as the outward and more acute symptom is concerned ; that is, the discharge will cease, the scab fall off, and nothing be left for the eye to dwell upon. With the seeming cessation, however, other and more deep-seated structures become involved. The disease leaves the surface only, and its virulence fixes upon the internal parts. The skin at the place thickens, becomes hard and gristly. There is no pain ; but the sensation is diminished, which, to the surgeon, is a far worse sign than is a little anguish. The thickening is sometimes stationary ; and the animal dies without any further evil afflicting him. There is, however, no security that it will remain thus passive ; for occasionally it increases in size, inflames, gets hurt or rubbed, and ulcerates : in fact, cancer of the scrotum is established ; and as this mostly comes on when the constitution is weakened, little relief and no promise of cure can generally be afforded.

These cancers do not appear to burst of themselves. They get sensation as they inflame ; but in every instance that has fallen under my notice, before ulceration has taken place, they have been slightly wounded ; either by the dog's dragging himself upon the earth, or otherwise. The smallest injury, however, is sufficient to provoke the action, which when once excited is not afterwards to be subdued. The ulcer being established, enlarges ; and the humanity of the owner does not allow the lingering and disgusting disease to take its course, but the poor dog is destroyed to spare its suffering.

At the commencement the diet must be changed, for the manner of feeding is at fault. The remedies proper to improve the general health must be employed, and everything done to restore the system.

To the scrotum a mild ointment will be sufficient. Should that not succeed, some of those recommended for mange may be tried; or the surface may be lightly passed over once with a stick of lunar caustic, care being taken to tie the head of the dog up afterwards to prevent it licking the part.

The measures already spoken of apply only to mild and recent cases. When the disease has probably existed for years, such remedies will be of little service. The skin being unnaturally hard and thick, feeling like cartilage, and giving the idea that a firm or resistant tumor is connected with the integument; such being the condition of the part, the surgeon pauses before he advises it should be interfered with. As it seems to be possessed of small sensibility, and appears to have assumed a form in which there is a probability of its remaining, the less done to the local affection the better.

The relief should be directed wholly to keep the cancer, for such it is, in a passive or quiescent state. There is no hope that nature will remove it; and every effort must be made to prevent its malignant character being by accident or otherwise provoked. With a little care the dog may die of old age, and the disease may even at the time of death be dormant. A very mild mercurial ointment may be daily applied to the surface. This will re-

move scurf, allay irritability, and prevent the itching, which might induce the animal to injure the part. The food must be good, proportioned to the work the creature has to perform,—sufficiently nutritive, but easy of digestion, and by no means heating. The stomach must be strengthened by tonics and vegetable bitters, combined with alkalis. Sedatives are sometimes required, and hyosciamus is in that case to be preferred. A course of iodide of potassium is likewise frequently beneficial; but it must be employed only in alterative doses, and persevered with for a considerable period. The eighth of a grain or half-a-grain may be given three times a day for six months; and on the first indication of irritability appearing, the medicine must be resumed. Should the symptoms of activity be such as to excite alarm, the iodide must be administered in quantities likely to affect the system. This is to be done with safety, by dissolving two drachms of the salt in two ounces of water, every drop of which will then hold in solution the eighth of a grain of the medicine. From two to ten drops may be given at the commencement, and every day afterwards one drop may be added to the dose, which should be regularly administered thrice in the twenty-four hours. The physic should thus be gradually increased until the appetite fails; or the eyes become inflamed; or the animal is in an obvious degree dull. When that result is obtained, the dose ought to be withheld for a time, or to be diminished three or twelve drops, and the lessened quantity only given until the symptoms have subsided.

The spirits, or appetite, having returned, and sufficient time having been allowed to make certain of the fact, the dose may once more be increased ; and thus by degrees be augmented, until it is worked up to from fifty to a hundred drops three times a day, beyond which it ought not to be pushed. Even while this is being done, it is well to give tonic and strengthening pills ; but purgatives are to be used with extreme caution.

Too frequently our assistance is not sought until the disease has assumed its worst aspect. There is then an open cancer, and we are asked to cure it. There is in medicine no known means of performing so desirable an object ; physic can, in such a case, only be palliative—whatever hope then remains must rest upon the employment of the knife. The surgeon, however, must well examine the part before he consents to operate. Entreaties will not unfrequently be urgent ; and where the life of an animal only is involved in the result, it is hard to say “no” to supplications which may be accompanied with tears. The professional man, however, must consult his judgment, and by its dictates resolutely abide ; for those who are most eager in their requests are always most sanguine in their hopes. The issue, if unsuccessful, will not do otherwise than expose the surgeon to reproaches, perhaps more bitter than the supplications to which he yielded were imploring. Even should the proprietor be silent, the reputation of the operator will be injured ; for, when the knife is resorted to, mankind will not tolerate failure. Therefore it is prudent, and

also humane, to consider how far surgery can eradicate the affection ere excision is employed to add to the immediate suffering, and perhaps hasten the consequence it was designed to prevent.

The tumor should be circumscribed, or, at all events, there should be around it a fair proportion of healthy skin whenever its removal is attempted. When such exists, the operation is justifiable; but without such being present, it is to be condemned. The skin is wanted to close the orifice, and it must be healthy, in order that it may properly unite. In extreme cases, where the life of the animal depends upon activity, it may be proper to remove both testicles; but this should, if possible, be avoided.

Castration in the dog is not of itself dangerous; but it renders the animal disposed to accumulate fat, and destroys many of those qualities for which it is esteemed. The creature afterwards becomes lethargic, and its spirits never are recovered. It is best performed by cutting through the spermatic nerve, and scraping the artery, so as to separate it; taking care to do this sufficiently high up to prevent the cord from being exposed.

When the operator has decided to take away the spermatic glands, he does so at the commencement of the operation. With one cut he lays the scrotum open, and pulling forth the testicle, divides the nerve; then with the edge of a blunt but coarse knife, scrapes it as the cords lie upon his finger. Having done this on one or both sides, as the case may require, he inspects the tu-

mor, the substance of which is now exposed to view. By the aspect of the growth he decides upon the course he will next adopt ; or rather shapes the manner he had proposed to proceed. Seldom will it occasion him to change his plan ; but he must be prepared to do so, if the appearances should be contrary to his anticipations. The skin is here of primary importance ; wherever it is not involved, it is dissected back, and every portion of hard or gristly matter scrupulously sought for and cut away. All such substance being excised, care is then directed to bring the edges together. A pair of scissors may be required to make them exactly even, but the less snipping there may be the better. To retain the lips of the wound in the places desired, collodium will be found far superior to sutures or plasters. It is with a camel's hair pencil laid in bands along the parts, which are held in their intended situations while it dries. A few threads of linen are embedded in it while it is in a liquid state, so as to increase its strength ; and layer after layer is added until the mind is assured the purpose is obtained. The application must on no account be made in one continuous sheet ; for before union can take place suppuration must be established, and spaces are necessary to allow the matter to escape. Therefore, in several fine strips stretching over the wound, and holding its edges close, the collodium is to be employed ; and this being ended, subsequent attention is generally required only to regulate the health, on which the healing process will greatly depend.

To stone in the bladder the dog is liable. The cause cannot be directly traced, but the symptoms are not obscure ; the animal is constantly voiding its urine, which, though small in quantity, is not of a healthy character. A few drops of blood occasionally are passed ; and, in attempting to go down stairs, sudden cries are often emitted. Fits of pain and seasons of illness are frequent, and the point of the penis is protruded from the sheath, never being withdrawn. The leg is not raised to void the urine ; but the creature strains when the act has either been accomplished, or there is no power to perform it. If the dog be taken on the knee, and one knowing the situation of the contents gently manipulates the abdomen, the body may be felt within the bladder, which will mostly be contracted and empty.

The nature of the disease having been ascertained, little can be done beyond relieving the immediate distress. Some writers have given directions for operating under such circumstances ; but none of them tell us they have successfully performed lithotomy upon the animal. In every case of the kind upon which I have been consulted, the idea of such a measure was not for an instant to be countenanced. Dogs thus afflicted, are mostly small, and the calculus is generally of great proportional size, prior to our attention being directed to it. In a creature so very delicate as the dog, every operation requires to be well considered before it is resorted to ; and though the cutler might make knives sufficiently diminutive for the occasion, it may be doubted if our

hands are sufficiently nice to employ them. The stones I have met with were of a size I would not have liked to have drawn through the urethra; and therefore, though I will not assert lithotomy cannot be performed upon the dog, I must confess I have not performed it, and must say I should require strong inducements to attempt it upon the animal.

All I aim at is to limit the increase of the deposit, and to alleviate the painful symptoms it gives rise to. A strictly vegetable diet best accomplishes the first object, and doses of ether and laudanum, repeatedly administered by mouth and injection, most speedily secure the second. Pills of henbane are likewise of service; and with them small quantities of the balsams may be combined, though the last should not be continued if they have any marked diuretic action. The peppers, especially cubebs, I have thought serviceable, and very minute doses of cantharides have seemed to be attended with benefit. Here, however, I speak with doubt; for the agents have by me been employed only in homœopathic quantities, and I have not the means of saying they had very decided action. They appeared to do good, since under their use the animals improved; and that is all I can state in their behalf. Proprietors, however, when the pressing annoyance is allayed, being told there is no prospect of a radical cure, do not generally afford us much opportunity to watch the action of medicines.

Hæmaturia or bloody urine is met with in the dog; and I (having been unfortunate in those cases where I

employed acetate of lead) adopted small doses of cantharides, and with these to my surprise succeeded ; for which reason I have persevered in my homœopathic treatment. The quantity of tincture of cantharides I employ is three minims to two ounces of water, and to my wonder, this appears to answer every purpose ; the only fault, indeed, that a general practitioner might find with it being that it did its work too quickly.

Swelling of the glans penis is not uncommon. It comes on suddenly, and the dog is by it rendered offensive to the owner's sight. The membrane is in a state of erection, and being so, is of course protruded ; and while thus exposed, the end of it loses its mild red color, becoming of a paler hue, and at the same time enlarging. Its size increases to such an extent, that when the erection subsides, it cannot be retracted.

This generally happens to animals that are weakly ; such being of what are called high breeds, or having recovered from some dangerous disorder. It is not a dangerous affection, and if taken early is very easily subdued. With a silk handkerchief, the exposed part should be grasped by the left hand ; and while every means is employed to push the gland back, the fingers of the right hand ought to be used, to draw the prepuce over it. A little time and care will, in most instances, do what is desired ; and there is no need of haste, or justification for violence. Oil is not required, as the parts are sufficiently lubricated by their own secretion ; and still less are those practices some persons have advocated, admissible.

The scarification of the glans, or the slitting of the prepuce, should not ever be allowed, save the absolute failure of all other measures has demonstrated relief is not otherwise to be procured. Before these severe resorts are sanctioned, the effects of cold and stimulants, locally applied, ought to be fully and patiently tried. A lotion containing ether, in such proportions as water will dissolve it, should be applied to the part; and spirit of nitric ether, to which double its amount of proof spirit has been added, may be with a camel's hair pencil painted over its surface. Ice is even better, but both, according as they can be readily obtained, are beneficial. Gentle manipulations will also be of benefit, and if the patience of the practitioner be not too easily exhausted, he will rarely need more to bring about that which is desired.

Retention of urine, though not very common in the dog, is, however, encountered too frequently to be termed a rare affection. It mostly accompanies debility, during the last stage of distemper, and is sometimes present in paralysis of the hind extremities. I have not seen a case in which it took the acute form, though obviously it may do so.

The symptoms generally are obscure; for in the majority of instances the distension of the bladder will simply aggravate the general uneasiness. The condition of the part, therefore, may not be suspected, but in such cases it is to be ascertained by manipulation. By taking the animal, and gently pressing its abdomen, if

the bladder be empty, the intestines will be felt; but if the viscus be full, there will be a soft and pulpy mass under the fingers. The sensation imparted by it conveys the idea that it is fluid, and the greatest care will in it detect nothing denoting substance or form. The proof thus obtained is positive, and will not deceive him who has accepted it. All pretending to administer to canine disease should be able to read this indication, but sometimes others direct attention to its presence.

The dog having the bladder gorged, and not so debilitated as to be deprived of power to move, or by paralysis disabled, mostly lies, but even then it is never at rest. The position is constantly shifted. Food and drink are refused, great dulness is exhibited, and a low plaintive moan is from time to time emitted. If made to walk, the animal straddles the hind-legs, and its gait is peculiar. The spine is arched, but the posterior limbs are not drawn or carried forward. If pressure is made upon the belly, it provokes resistance; and any attempt to raise the dog from the ground induces it to struggle.

Relief should without loss of time be afforded by the use of the catheter. When I was a pupil at the college, the professor used to assert that the introduction of such an instrument was in the dog a physical impossibility. The bone found in the penis of this animal, the gentleman instructed his pupils to believe, opposed an obstacle which could not be overcome. My former teacher, however, was in error. He had either never made the trial,

or he had not judgment sufficient to conduct an operation which, when properly undertaken, is remarkably easy and simple. I believe I was the first practitioner in England who used the catheter for the dog, though prior to my doing so, reports were published of the instrument having been employed in France. On the Continent, however, I have heard of no one who had thought of introducing a catheter into the bladder of the bitch. That also I have done ; and find the operation to be unattended with danger or difficulty. The method of operating upon the female will be explained in another place. Here I have to speak of the mode in which the male is to be relieved.

Let the dog be placed upon its side, and by means of a handkerchief the penis be drawn. A catheter of proportionate size must be selected. Metallic tubes will not do ; but the gum elastic are to be employed. Before one of these is introduced, the wire must be taken out, and the outer surface moistened with olive oil.

The human catheters answer admirably for small dogs ; but these are not made long enough to be of service to animals of the larger kinds. For a dog of middle height, an instrument twice the length of those employed on man ought to be at hand ; and for a huge Newfoundland, one thrice as long will be useful. The shorter catheters may be of the sizes sold as Nos. 1, 2, and 3 ; the middle length, 4 and 5 ; the longest, Nos. 6, 7, and 8.

The dog being placed upon its side, and retained there in a position such as the operator may think most advan-

tageous to his movements, the catheter is introduced with one hand while the penis is held by the other. The meatus being found—there is no great ingenuity required to discover it—the instrument is inserted and pushed gently onward. At first its passage is easy, but it has not gone far before a check is felt. The stoppage arises from the spasmodic contraction of the canal, caused by the point of the instrument having reached the bone of the penis. For a period the passage is effectually closed; but no force must be employed to overcome the obstacle. Gentle but steady pressure is kept up; and under this it is rarely longer than a few minutes before the spasm yields. The catheter then glides forward, and the operator, resigning the hold of the penis to his assistant, passes his free hand to the perinæum. When he feels the point of the tube below the anus, he uses his fingers to direct its course,—for at this part the canal curves, taking a direction forward,—and after a little further way has been made, another check is experienced. This last springs from the contraction of the neck of the bladder; and once more gentle, but steady pressure must be employed to overcome the spasm. It rarely resists long; but the sudden absence of all opposition, and the flow of urine, shows that the object of the operation has been obtained.

The dog offers no resistance to the passage of the instrument. I have never known one to cry, or seen one exhibit a struggle. I could not account for this by attributing it to any fondness for the necessary restraint,

under which the creature is temporarily placed. During the flowing of the urine, the dog invariably remains perfectly quiet; and the relief afforded seems to dispose it almost to sleep; for after it is over, the animal lies in a kind of happy lethargy. The fluid, however, does not jet forth or empty quickly. The operator must not be impatient, for the stream is perfectly passive; since, in consequence of the distension, the bladder has lost its contractive power. To obtain the whole of the contents, has sometimes required a quarter of an hour, and the quantity procured has frequently been quite disproportioned to the size of the patient. From a small petted spaniel, brought under my notice by my friend, Mr. Henderson, I extracted very nearly half a pint of urine, and the animal from that period began to get well. From a very small dog, the property of a lady of fortune, I for several days, every night and morning, withdrew about four ounces of the excretion with marked benefit to the animal. The operation is tedious, but it repays us for the time it occupies. Towards the conclusion the stream is frequently interrupted. It stops, then recommences; ceases, and then begins again; and the last portions are often ejected with a force which the first did not display. A little straining may attend the closing of the operation. For this the operator must be prepared, and immediately withdraw the catheter; lest the bladder, energetically contracting upon it, should cause the point to pierce the sides of the viscus. The instrument is no longer required when straining is excited; for then the contractive func-

tion has been resumed, and nature will subsequently perform her office without assistance.

The bladder that has been relieved, may require the care of the surgeon a second time; but no officiousness should be indulged in that respect. Let the necessity be present before the operation is resorted to; and the need for its adoption can be so accurately ascertained, that there is no excuse whatever for needless interference. The operation is attended with no immediate danger or subsequent ill consequences, that I am aware of; but it is particularly recommended by the fact, that in the dog it is not accompanied with that pain, which in man usually provokes exclamation, sometimes causes fainting, and not unfrequently induces irritability of the membrane lining the canal.

The testicles are occasionally the sources of annoyance to the proprietor. In one instance a high-bred dog was sold, the person who bought the animal making the purchase with a view to breeding from it. Disappointment followed, for no sexual desire could be excited; and as a stock-dog, the beast was useless. An examination was then made, and the scrotum was discovered to contain no glands.

A most infamous fraud was now accused against him who had sold the dog; and as dog-dealers are not so respectable, and are almost as little credited as horse-dealers, any charge imputing dishonesty required no evidence to substantiate it. An infamous villain was convicted of having castrated the dog before he parted with

it, in order that a valuable strain might not be rendered common. This same dog was brought to me. I could detect no testicles, and I could perceive no cicatrix. The body was fat and the disposition sluggish, but the frame well developed. It was possible the scar, if the operation had been performed early, should have disappeared; and there are means practised by which the testicles can be in a great measure destroyed without making an incision. Here, however, there was nothing to denote they had been present; or evidence to show they had been removed. I could by manipulation discover no bodies in the inguinal canals. Under the circumstances, I was unable to give a positive opinion; but I leant to the idea that the appearances resulted from defective conformation.

My indecision exposed me to some remarks at the time; for the veterinary surgeon is never permitted to doubt. Ignorance is the only reason the majority of his patrons can conceive to account for his deliberation. A year subsequent, however, the dog died; and the body was then brought to me, in order that the point might be decided. I found both glands, which were not larger than they should have been at birth, within the abdomen, whence they never had descended.

It is very common to find small dogs, especially spaniels and terriers, with only one testicle in the scrotum; but in the larger number of such cases the other can be detected, though it will be of small size, within the canal. Animals in this condition are quite capable of

being used as stock-dogs, and are for such purposes as certain, as those more perfectly formed. Of this I have had repeated proofs; and, consequently, the absence of one gland is not to be viewed as a serious defect; though I do not know that it can be regarded in the light of a recommendation. Speaking from observation, and bringing the results of positive experience to bear upon my opinion, I may assert, that in diminutive dogs—animals intended only to be esteemed as “toys,”—the absence of one testicle is not of the slightest import; though, in the larger breeds intended for actual work, I should by no means be inclined so to regard it.

The testicles are also subject to enlarge and become hard, more than is natural. In that state they most frequently are devoid of sensation; though sometimes, but rarely, they are unnaturally tender. The size and degree of feeling may be the only indications; but generally the scrotum is at the same time thickened, and exhibits an alteration in structure.

Blaine speaks of castration under such circumstances. I have hitherto abstained from direct interference. Notwithstanding the alteration, which has been obvious, I have, beyond daily rubbing in the ointment, containing camphor and mercury, resorted to no topical application. In one instance I employed an unguent, containing iodine; but it was ultimately discontinued, from a conviction that it was in its operation injurious, seeming to produce effects the opposite of those desired. The food, however, I alter; and by gentle aperients I endeavor to

regulate the bowels. A course of the iodide of potassium I have likewise adopted, and can with confidence recommend. Alterative doses only should be administered; and the drug ought to be continued for three months at least. If prepared in the following form, it will not perhaps be readily swallowed up, but the animal will very seldom violently resist its administration:—

Simple syrup Two ounces.

Water Six ounces.

Iodide of potassium . . Fifteen grains to one drachm.

Dose, one drachm, or a teaspoonful thrice daily

The quantity ordered contains from a quarter of a grain to a grain of the iodide; and, if there be motive for desiring it should be exhibited in substance, the like amounts may be made into pills with conserve of roses, and a little powdered liquorice. The form is of little importance; but I prefer the fluid, because I have found that the animal can, with no great trouble or vast tax upon ingenuity, be brought to accept it readily; and with dogs, as with children, we gain by convincing them we are practising no deception. These creatures possess remarkable discernment: it is astonishing how long the doubt, when once excited, will act upon the canine mind. A pill, for this reason, is better pushed down the throat than presented in meat; for the imposition, being once detected, will for a long time subsequent to it be suspected. It is, therefore, best to proceed openly and

without fear. So strong is my impression that dogs have a general comprehension of the meaning of sounds, that when I have medicines to give, I always address them, saying, "Come and take your physic." Some will do as they are ordered; but others are less obedient. I have met with none (save clump-headed spaniels—which of all dogs are the very worst behaved) that were not to be subjected. Frankness and determination operate wonderfully on these occasions. The animal soon learns it must submit, and quickly ascertains you have no desire to hurt it. The natural and beautiful confidence the brute reposes in man is thus appealed to, and it is surely wise not to tamper with so noble a feeling. With dogs be resolute and straightforward; have no sense of fear, and have no desire for deceit. Call upon the innate submissiveness of the creature, and claim its obedience as a right. The amiable brute will respond to such appeals; as the struggles which result from weakness operating upon sensibility will originate confusion, and provoke those bites which are not maliciously aimed, but intended for self-defence.

GENERATIVE ORGANS.—FEMALE.

THE ignorant are always inclined to be officious where procreation is concerned. The knowledge they pretend to, concerning such matters, however, consists of mingled indecency and mystery; and, when exposed, only commands contempt. The poor dog, nevertheless, suffers cruelly through the practices which such persons subject

it to ; and great as may be the ignorance of the parties who go about the country under various assumed denominations, to torture the canine race, surely, they who pay such fellows, or allow their animals to be abused by these pretenders, display a want of sense even more deplorable ? Still this is done every day. The nobility continue to be the profitable dupes of a host of confident impostors ; and strangely seem to be infatuated with the belief that the man who sells a dog can likewise administer to the diseases of the creatures in which he trades.

The bitch is most unfortunate in the variety of severities she is compelled to undergo. Some foolish persons have imagined they can at will induce the periodical desire for offspring in the animal. To do this, violent stimulants are employed ; being often given by the mouth, but more frequently injected up the passage. I have no proof that such means are ever successful ; and were they capable of doing all they are employed to accomplish, I would certainly refuse to make use of them. Nature cannot be coerced to man's profit ; and any interference with her laws is always dangerous. The consequences may not be so immediate that in every instance the effect is traced to the cause ; but the major portion of the affections of which the female generative organs of the dog are too commonly the seat, may be attributed to the carelessness, or cruelty of the owner, or of those by whom he is surrounded.

Various morbid growths are apt to appear upon or

within the parts when old age advances. These have been generally produced by violence endured at a period long prior to the development of the disease. Potent injections may have been employed to bring on the condition called "heat;" or undue force may have been exerted to drag away the pups when the bitch was in labor; or brutality may have been resorted to, to tear apart the animals during the performance of the act of impregnation. Other sources of accident and injury may likewise operate in disposing the delicate membrane of the vagina to exhibit disease; for boys, and others also, are cruelly inquisitive, and the dumb creature cannot complain.

The growths that appear upon the parts are not peculiar to its locality. They are only such as may be present on similar structures. They assume one of three forms, viz. either that of tumor, fungus, or polypus.

The tumor may be of any shape or size; and it may be very hard or comparatively soft. Its consistence and dimension will depend upon its character; and this is seldom in two cases exactly alike. Mostly it is confined to the more external parts of the passage; but so deep-rooted is it that it cannot be conveniently dissected away. It may have a broad base or widely spreading attachment; and those I have examined after death most frequently were mixed up with the structures on which they seemed to repose.

When such is the case, nothing can be done beyond

attending to the general health ; as by supporting the constitution, the tendency to disease is likely to be checked. To the part no local application should be used ; and every care is required to prevent the animal from injuring it.

When more externally situated, a careful examination must be made, to decide whether there is a fair hope of the growth being successfully excised. If it is hard and circumscribed, an operation is justifiable ; but the skin should be healthy. All the integument must be preserved, and the entire bulk of the morbid body cleanly taken away. The parts are not so sensitive as to render the operation exceedingly severe ; however large the wound may be, it generally heals rapidly. After the operation no dressing will be required, unless some untoward circumstance should arise, when, of course, the remedies needed to counteract it must be resorted to.

Fungus is invariably preceded by a purulent discharge, which, when the growth is developed, is mingled with blood. The system is feverish, and the parts are hot, irritable, and painful. The animal is continually licking itself, and is disinclined for motion or food.

In the first instance the cure is speedy ; but if allowed to proceed, the affection is troublesome, and may be difficult to eradicate. When any unnatural discharge exudes, a mild tepid lotion should be injected. It should be of an astringent nature, and an infusion of green tea or any of the eye-washes recommended will be of service. The strength should likewise be supported, and

the cold bath given daily, while exercise is particularly attended to.

When blood mingles with the exudation, a careful examination, with a speculum, if required, must be made; and the diseased surface should be touched with lunar caustic, or sulphate of copper. After this, an injection of the chloride of zinc, one grain to distilled water one ounce, should be employed thrice daily.

Should, however, the growth be of any size, it should be snipped off with a pair of probe-pointed scissors; and the lunar caustic ought then to be applied and repeated when the bleeding has entirely ceased. If the bleeding be excessive, cold water may be thrown up, or a pair of bellows, to drive a current of air upon the place, supposing it to be situated where it can be thus acted upon, may be made use of. Too frequently, however, the affection is deeply located, and then injections are alone to be resorted to, though, at the same time, constitutional measures may be employed. The case is not to be despaired of, but the prospect of success may not be satisfactory.

Polypus is a round pear-shaped body, generally hanging by a pedicle, or neck, like to the stalk of the fruit. It is smooth, also moist, and highly vascular, having a red and shining appearance. When present, its attachment is commonly rather backward, or pretty deep within the passage. A small glairy discharge is at first observed. The fluid emitted is simply mucous, caused by the increased secretion of the membrane, which is

irritated by the presence of a foreign growth. The parts subsequently seem to be swollen, and the animal does not appear otherwise affected. At length something red and glistening is remarked to protrude. It is seen occasionally, and then withdrawn ; but most generally it appears subsequent to the urine having been voided. Ultimately, however, it constantly hangs out ; and as, when exposed, it annoys the animal, it may be injured, and bleed freely.

The practitioner must cautiously examine the part. Before he makes up his mind concerning the nature of that which is presented, he must assure himself that the womb has not become inverted. I was once requested by a veterinary surgeon to see him remove a polypus from the vagina of a bitch, as he had determined to excise it. Luckily I went, and saved him from cutting away the animal's uterus, which would assuredly have destroyed her. A contrary course was pursued, and that dog, in three days afterwards, was returned to its master well. The following particulars will enable him who may be in such a difficulty to discriminate the uterus from a polypus.

The uterus is soft, but rough when exposed ; no vessels are to be seen upon its surface ; it does not shine ; it is not round or pear-shaped ; it feels like a thick empty sac, and never appears upon pressure to contain any substance ; it cannot be traced to any stalk-like attachment, and, if returned, the situation it will occupy denotes the position it was ordained to hold.

A polypus is smooth, glistening, and on its surface generally exhibits vessels. Its covering is always tense, and contains a semi-solid substance; it is often sensitive, and, if the space allows of the passage of the finger, the neck or point of attachment can be felt; it cannot, like the womb, or the bladder when inverted, be forced inward, or made to take the situation which either of them would occupy.

Moreover, the appearance of a polypus is an affair which must have attracted notice some months prior to its occurrence; whereas, the inversion of the bladder or the womb, occupies but an instant, and is commonly preceded by no symptoms.

Being assured there is a polypus, if a fine silk can be passed round the neck or stalk and be tied tight, so as to cut off the circulation of blood to the part, the growth will drop off in two days, supposing the operation to have been effectively performed. When a ligature cannot be applied, the body should be seized with a proper pair of forceps, and it should then be turned round and round several times. The object in doing this is to twist the stalk, so as to strangulate the vessels within it; and this sometimes answers quite as well as the ligature itself, but the last is best, as being more sure and less likely to be attended with accident. When neither can be accomplished, the polypus may be forcibly dragged away, or literally torn out; but the pain of this is very great, and the operation has nothing to recommend it but its absolute necessity.

The polypus being removed, perfectly cold, mild, astringent injections, to act as healing and cleansing lotions, should be used ; or if any portion of the stalk remain, to that caustic may be applied.

Authors speak of cancer of the vagina. I have seen nothing yet in the animal that I may designate by such a term. I have, it is true, met with serious wounds and grievous sores ; but all of these have yielded to treatment, and I am not aware that, if their nature had been malignant, they could have been subdued by any medicinal measures.

Dropsy of the uterus I have encountered, though, as no teacher or work speaks of such an affection in the dog, it was some time before I was able to recognise the disease. The bitch thus afflicted is generally petted into ill-health. She is fat, slothful, and weakly. All the various symptoms show the digestion to be deranged ; and in most cases she eventually perishes of abdominal disease, which is in its termination independent of the condition of the uterus. The only marked symptom directing attention to the womb, is the cessation of every sign indicating sexual desire. For years there may be no appearance of "*heat* ;" but otherwise the bitch shall be regarded only as delicate, and not be esteemed to be decidedly unwell. If, however, the body of the animal be examined after death, the body and horns of the uterus will be found distended with a thin aqueous fluid ; and the walls of the organ will be seen to be very attenuated, and much wanting in vascularity.

There is no precise limit to the size the uterus may attain; but, in consequence of its increased volume, it occupies another situation to that it naturally holds in the abdomen of the bitch. Generally, when dropsical to any extent, it will repose immediately upon the linea alba; and it is apt to be injured if care be not taken when the *post mortem* examination is made.

For dropsy of the uterus, general measures must alone be employed, and these must be of a tonic character; for, however much the dog may be petted, or however fat its body may be, the disease is always consequent upon debility. Among the tonics are several which have a stimulating action upon the uterus, and where it is suspected to be affected the following medicines may be administered:—

Powdered cinnamon . . . One scruple to one and a half drachm.

Powdered borate of soda . . . Ten grains to two scruples.

Powdered secale cornutum . . . One to six grains.

Extract of gentian . . . One drachm to half an ounce.

Powdered quassia . . . A sufficiency.

Make in twenty-four pills, and give three daily.

Iodide of iron Ten grains to one scruple.

Powdered cinchona bark . . . One drachm to half an ounce.

Extract of gentian . . . One drachm to half an ounce.

Make as in the previous prescription.

Iodide of potassium . . . Ten grains to one drachm.

Tincture of cantharides . . . Five drops to one scruple.

Simple syrup One drachm.

Water Two ounces.

Let a tea-spoonful be given three times a day.

In some cases the pills first recommended may be given with the drops last proposed ; but the action must be watched, and either the dose diminished or the medicine withheld, if it appears to have any violent effect. The intent is to work gently and gradually upon the system, and no immediate result should be expected or desired.

PARTURITION, OR PUPPING.—This is a very serious branch of the present subject ; for, through the inability to bring forth their young, many a valuable bitch is annually lost ; and, by the injudicious measures intended to relieve them, many more are yearly sacrificed. I know of no book that gives proper directions for the guidance of the practitioner ; indeed, the rules laid down by both Blaine and Youatt are calculated to do mischief whenever they shall be put into practice. The reader must, therefore, be content to accept that which will be submitted to his consideration on this topic, as the result of the experience of an individual whose observations have been made only during a comparatively short period, and whose opinions consequently are not to be regarded as confirmed. While directing attention to what has been declared rejected, the author solicits no confidence in his judgment, beyond that which results shall sanction, and reason approve.

Little gentlemen are said to incline towards what are termed fine women ; and many persons will remember the caricature, in which a strapping Life-guards-man was depicted, stooping to salute a lady who scarcely reached

the top of his boots. The like admiration for bulk appears to be entertained by the members of the canine race. Small curs are much disposed to bestow their affections upon huge Newfoundlands ; and diminutive bitches, if followed by a host of suitors, will give the preference to the largest of the group. All descriptions of dogs will freely have intercourse with one another ; and as these animals are of such various proportions, the female is frequently unable to give birth to the progeny of a gigantic sire. Care consequently should be taken to provide suitable males when pups are desired ; and in all cases the dog should be smaller than the bitch. It is not, however, a sufficient precaution that the dog be of less size ; for it, or the bitch herself, may be the dwarf of a large stock, and being so, may be capable of getting or gestating offspring as huge as the race from which either of them sprung. It is possible, therefore, for a small dog to be quite as dangerous as one of great weight ; and I knew an animal of this kind which had been the cause of many deaths on that account. The animal alluded to was the property of a gentleman (now deceased) who had long graced the bench. The dog was a handsome Scotch terrier ; and, being small, it was frequently solicited as a stock-dog. It was, however, very deceptive ; for a bitch twice its own size could with difficulty survive the consequences of its embraces. It is a diminutive example of a naturally large race ; and in its offspring there is a disposition to return to the original size. Therefore, not only must the dog be small, but, if

possible, it must have been derived from a small stock. The giant's dwarf may beget a giant ; and how frequently do parents of short stature have children who can at maturity look literally over their heads ! Certainly more important, however, than the size of the dog, is the magnitude of the stock whence the bitch is derived. A full-sized pug bitch, whose portrait is given beneath, had connexion with a setter dog. She was



sent to me to be delivered ; but with little assistance the affair was accomplished. A small mongrel bitch, but a great favorite with its master, broke loose during his absence, and had connexion with a dog at least four times its size. The animal was brought to me to ascertain what could be done, her death being expected when the nine weeks expired. At the proper period, however, she brought forth four pups without any assistance. On the opposite side numerous instances might be quoted : but, on this topic, enough has been said to warn the reader that the dog, however small, should not be permitted to

approach the bitch whose mother was large, or whose brothers and sisters stand much higher than herself. Let the reader look at the two portraits that follow.



THE BLOOD-HOUND.

They are evidently of one and the same family. They both had a common progenitor. The beagle is the blood-hound, only of smaller size; and often these beautiful diminutive creatures suffer in parturition, or throw pups whose size takes from them all value. However, for the chance of security, if for no more tangible object, let the dog, in every instance, be smaller than the bitch; and let it also have no disease, but be in perfect health, strong and lively. A dog in any way deformed or affected with any disorder ought to be avoided. Blindness, skin eruptions, piles, paralysis of the tongue, and a host of other annoyances, I more than suspect to be hereditary. The mental qualities are transmitted, as

well as physical beauties and defects. Sagacity, health, and beauty are to be sought for, and if all cannot be obtained, those most desired must be selected. Where shape is wanted, let the dog possess such form as the



THE BEAGLE.

bitch is deficient in; thus the female having a long nose or legs, may be put to a male short in these respects; and the rule may be applied in other instances.

Judgment is needed; and, of course, the choice is to be in some measure regulated by the kind of stock the dog has been known to get. All dogs kept as stock-dogs have reputations for the qualities of their offspring; and these, sometimes, are better guides than the appearances of the animals themselves; for it does occur that the pups procured by a diminutive dog, do occasionally prove the very reverse of what might be anticipated.

The bitch, for breeding, should be rather long in the back; and it is scarcely possible for her to be made too

wide in the hind-quarters. She should be strong, and rather large than small of her breed; and where a diminution of size is desired, it is better to obtain it through the father than the mother. When the last method is adopted there is no danger of the bitch bearing pups of gigantic proportions, and which she may not be capable of bringing forth. The breed, also, should be as pure as possible; for there is a disposition in these animals to throw back, as it is termed; that is, supposing a bitch to be of spaniel breed, to that degree which allows of no cross being detected; nevertheless if there should be a stain of cur or terrier in her pedigree, one or more of every litter she bears, may prominently exhibit it. It is often long before this natural proof of a degraded family can be entirely eradicated; and it is very common for persons to express surprise at the pups born resembling neither of the parents they were derived from.

Another caution not to be neglected is, to keep the bitch from all communication with dogs it is wished her progeny should in no way resemble. A low-bred playmate may not appear to be of much consequence; and the proprietor may imagine, if actual connexion is provided against, no further precaution can be required. The females of the canine race, however, are able to bestow their affections; and tender recollections are as potent over them as they are known to be in other cases, where higher animals are concerned. Bitches are not always prudent in their loves, but are apt to fling themselves away on curs of low degree. If reared with

a companion of vulgar appearance, there often springs up between the pair a devotion which no time can afterwards subdue. The passion, for such it really is, becomes of a more than romantic endurance. The loved one's image grows to be so impressed upon the mind—so much so, that all the fruits of the body afterwards bear its likeness. There may have been no intercourse between the pair, but to animals of her breed, the bitch may, contrary to her longings, have been devoted : and yet, in the offspring she brings forth the object of her affections will be represented. This, however, is very likely to be the case, when the first male accepted is by accident or neglect of impure origin. There have been several well-marked cases illustrative of this fact, and probably many which have never been properly observed. The peculiarity of a high-bred bitch bringing forth a blemished litter, would be set down to her throwing back ; but perhaps a fair proportion of the cases thus accounted for, might with justice be attributed to the mental influence which has been pointed out.

The first indication of a bitch approaching to desire, is a slight enlargement of the teats. This may be observed for a week, more or less, before the parts show any signs of change. These last, however, soon begin to swell, and a thick glairy discharge of simple mucus drains from them in small quantities. The secretion becomes more copious, and thinner, gradually changing its character to that of blood ; and as that alteration in the fluid is remarked, the labia grow larger, redder, and more hot.

The animal has then "heat," or œstrum, upon her, and her system is generally excited. She is more lively, and should any other dogs be with her, she indulges in a variety of coquettish antics. Her attitudes when thus excited are very picturesque, and the beauty of the animal is never exhibited to greater advantage.

A lively grace animates her whole frame; and she is now the creature a painter should study, or a poet describe. She will not immediately accept the male, whose passion she evidently practises all her arts to excite. For a few days, perhaps, a romping courtship may go forward before union is actually permitted.

Dog fanciers almost universally attach importance to the appearance of the discharge. Some say the dog should not be offered before the bleeding begins to diminish. If these rules are not attended to, I have been most confidently assured the evil consequences of the neglect are certain to be present in the pups. The litter prematurely begotten, it is foretold, must be bad in some way; though why this should be the case, or how the cause produces such effects, none of the dog fanciers have been able to explain.

As by attempting to obey these injunctions I have known many disappointments to be produced, there was every inducement, even had I not been inquisitive from professional motives, to set me testing the truth of these assertions; for I am not inclined to sneer at every opinion announced by persons devoid of education. A power to observe is by no means regulated by an ability to read or

write ; and as the dog fanciers bred much more largely than I possibly could do, their experience entitled their opinions to attention. Nevertheless, ignorance is so exposed to misconception, that its declarations at all times should be examined, and I resolved to test the truth of the rule which so many announced to be established.

The result has not confirmed the belief generally entertained ; but it has induced me to conclude that the dog may be allowed whenever the bitch will permit him. Nature, I have found, regulates the matter, so as not to necessitate man's supervision. The bitch will, by her instinct, decide the question ; and she may, without any dread of mysterious consequences, be left to its direction. In support of this conclusion, a large number of animals can readily be adduced. The numerous bitches, especially in the country, that are placed under no restraint, but are left free to gratify their impulses, afford obvious demonstration of the fact. These creatures have litters that are much stronger and healthier than those which are more tenderly guarded.

The fatality that attends the offspring of very choice breeds, does not infer that the customs they are subjected to conduce materially to their benefit ; and my experience, so far as it has been carried, supports the conclusion which this circumstance would seem to countenance.

Let the bitch therefore follow her inclinations ; but it is not unusual for force to be employed on such occasions. This should never be allowed. The female ought

on no account to be compelled ; but it is a common practice to employ restraint when she is unwilling. Some assistance may occasionally be needed, particularly with the smaller breeds, which are apt to be physically disabled ; but it should be limited to such offices as favor the desires of the parties principally concerned. Whenever man's aid goes beyond that, it is likely to be injurious ; for if Nature orders an animal to decline the gratification of its instinct, we may rest assured there is good reason why such a phenomenon is exhibited, although we may not possess the acumen to rightly interpret its indication.

Some people permit the dog and bitch to remain together for several hours ; but with favorite stock-dogs, it is customary to present the female twice. I have found the second visit to be needless ; and a single occasion has never yet failed to procure me three or four pups, which is quite as many as the majority of bitches are able to rear. The ordinary practice, however, appears to do no harm, so far as I am aware of its consequences. I do not, therefore, object to it ; but I know it is not imperative, and it is well to be convinced on such a point.

After the bitch has been lined, she should be most carefully watched. Her desire rather increases than diminishes, and she will be most anxious to escape in search of new admirers. Her appetite renders her ingenious ; and the owner is often vexed to find she conquers at this time those bounds which at other periods confined her. Let her be securely housed, or kept under the eye

of her master, who must not forget her propensity to rove.

When the discharge ceases, and the local swelling subsides, the necessity for vigilance is at an end. The animal has then returned to chastity, and will be as obedient as before her passions were inflamed. During the nine weeks of gestation, she demands no special care. She thrives best if left to take her chance, and does better in proportion as she is not pampered. Her food should be wholesome, and her exercise rather increased than diminished. She should not be made fat, neither ought she to be suddenly reduced.

The safest course is to take no notice of the particular condition of the animal, but to let her ordinary treatment be continued without any change. The bitch will return to her usual manners and appearance, nor will there be for some time anything to denote her having conceived. In the middle of the fourth week, however, the presence of the young within the abdomen may, by skilful manipulation, be detected. I know of no one who has before made the observation, but I am confident as to the correctness of the statement; since I have frequently been enabled to inform parties that their dogs were in pup, when the circumstance was not suspected. In many instances, I have been able to ascertain before the expiration of the first month the number of young that would be born; but of course these matters are not always to be told with equal certainty. They can, however, be generally ascertained with tolerable accuracy;

but where there is only one sense to guide the knowledge, and that one is not quite unobstructed, the judgment is liable to be mistaken with regard to particulars, though it may be assured concerning the main point.

To discover whether a bitch is in pup, let her be placed upon a table, and her fears or excitability banished by caresses. Then lay her upon her side, and with the fingers gently manipulate the intestines. If the womb is impregnated, the person, directing his attention first to the situation the uterus occupies, near to the rim of the pelvis, and inferior to the rectum, will there detect round smooth bodies, like little eggs. These may not be perceptible if the bladder be loaded; but if the catheter be employed to draw off the urine, they will surely be felt. If the rectum be full of fœces, it serves as an admirable guide to the position of the uterus; though he who is acquainted with anatomy needs no such assistance.

Some globular substance being detected, the fingers are advanced, and if more than one pup be conceived, another similar to it will speedily impinge upon the touch; then another, and so on, until the whole of the promised family have been thus announced. The last is the most difficult to discover: for should there be more than two or three, it may, and will, generally occupy the extremity of a horn; and, in that situation, may escape observation. There are to the womb of this animal a pair of horns, which are long, and extend to the region of the kidneys. Both cannot be traced at the same time, and there is a chance of the two being confounded.

Therefore it is well not to be positive as to the precise number of young the bitch will bring forth ; and I never presume to speak confidently upon the point ; for though, in the majority of cases, my opinion may have been corroborated, nevertheless, I have often known a pup more than I supposed the uterus contained to have been delivered.

From the end of the fourth week, the litter, as it were, go away, or are lost ; but when the seventh week arrives, the contents of the abdomen may be plainly detected ; and if the bitch be taken upon the lap, and her belly supported with the hand, they at this period will be felt to move, and the motion even of their limbs is clearly recognised.

Milk appears in the teats about the middle of the ninth week, and the presence of the fluid declares the event is near at hand. The following day, or the one succeeding, is marked by a mucous discharge from the vagina ; and when that is witnessed, parturition is seldom delayed beyond a day or two at most.

The exact period is announced by the animal being disinclined for food and desirous of solitude. Some bitches do not wish for seclusion ; but others are very anxious to obtain it ; and in either case the disposition should be gratified. All that is necessary for the comfort of the creature should be provided ; but if the accommodation designed for her be rejected, she should as far as possible be allowed to indulge her own liking for another spot.

As the time of parturition draws near—that is, when the increase of mucus is remarked—a daily meal of boiled liver should be given ; but nothing stronger, of a laxative nature, ought to be administered, unless the absolute necessity of such relief as aperients afford is ascertained. Many persons are in the habit of giving buckthorn or castor oil at this season ; but the dog is naturally very delicate ; and nothing calculated to detract from the strength which the coming effort must severely tax, should be heedlessly resorted to.

When the bitch retires, let her wish for privacy be respected. For three or four hours allow her to be undisturbed ; but at the expiration of that time, the person who most enjoys her confidence, may approach her. After an exchange of recognitions, the animal may be examined. If nothing extraordinary can be remarked, nothing should be done beyond offering food and water ; neither of which, however, need be pressed upon her. A day possibly may thus pass, without any sign of decided progress being made ; nevertheless, the owner's patience must not be alarmed, for the greatest danger springs from premature assistance.

The first pup is often long before it is delivered ; so that the cries be not sharp, loud, and frequent, the delay need not generate fear. Four-and-twenty hours having elapsed, and the indication of suffering with constant straining being present, the help which man can give should not be pressed upon the animal. The throes must cease, or the bitch appear exhausted by lying on its side,

and emitting low moans before any aid is offered. Then the little finger, well greased, may be passed gently up the vagina, to learn if anything be within the passage; and if a pup be felt, instruments, as hereafter described, may be employed; but, on no account, need the finger be pushed beyond the os uteri. If the mouth of the womb be well opened, free, and the passage clear, the attention must be bestowed upon the bitch, and every means employed to revive the strength and bring back the pains. Some unusual circumstance is needed to justify manual interference—such as a pup with its side presented, or the os uteri well expanded, and the head of a dead pup filling up the space.

To such an extent have I practically followed out the measures here recommended, that under my care the labor-pains of a Scotch terrier ceased without anything being born. The bitch returned to her customary habits, but appeared dull, while a dark discharge was emitted. I told the proprietor the bitch had a dead pup within her, and entreated him to give the animal time. He consented to do this; and on the fourth day from that of the unsuccessful labor, the animal was delivered of a dead pup, with perfect ease.

The presence of straining alone should never be regarded as a symptom of pupping being actually at hand. The bitch, like other animals, is subject to spasms, called false labor-pains. These are in appearance highly deceptive, for they are generally accompanied with plaintive cries. To distinguish their true character, let the

hands embrace the abdomen; and at the time when spasm seizes her, let gentle pressure be made upon its sides. If the pains be false, the convulsion will be felt to render turgid the muscles of the abdomen, but nothing within it will at the same time feel hard. Should, however, the labor have commenced, other signs than these will then declare the fact. When the throes come on, the uterus will contract; and beneath the hands it will be then felt a hard, harsh, and solid body. Its character, when naturally excited, is not to be mistaken; but is so well and strongly marked, that there is no excuse for not detecting its indication.

For false pains nothing need be done for some time; but if they continue, and seem to distress the animal, ether and opium may be freely given by the mouth; this will have the effect of quieting the spasm without injuring the pups.

The existence of true labor being ascertained, should there be sufficient cause to suspect obstruction to be present, then let the finger be oiled and introduced up the passage with caution as directed. Some persons when called to a bitch in pup, always begin at once doing this, but it should not be done unless there be some reason for the practice. I have known fellows poke the poor animals about, as though to do so was an important duty, which they were bound incessantly to perform. The introduction of the finger cannot do otherwise than remove the mucus which Nature provides to lubricate the passage and facilitate the egress of the pup. It is the

mildest and best moisture the membrane can receive, and its removal is not to be slightly thought of. The finger, moreover, by the friction it occasions, irritates the parts ; and however gently it may be introduced, it cannot otherwise than in some degree have this effect. The less it is used, therefore, the better ; and when it is inserted, the attention should be alive to note every circumstance the touch can acquaint us with.

Other parties, when the labor is difficult or tedious, think it advisable to place the bitch in a hot bath. All the authors I know of, recommend this measure ; but I must, without reservation, in the strongest possible terms, condemn it. In obedience with the directions of those who wrote or lectured on this subject, I originally followed the practice ; but it was not long before I was apprised of its evil effects ; and my wonder now is, how so injurious a custom ever came into general favor. I have known the bitch, when the throes were energetic, to be placed in the warm bath ; and under its action to have indeed been quieted, for the pains never subsequently returned. The efforts, upon the vigor of which the delivery depended, have, to my knowledge, been more than once, twice, or thrice, dispersed, by the warmth which at such a time is a poison ; for I can recollect but few cases where the bitch was taken from the water to survive.

Still, as the assertions of an individual cannot be supposed of sufficient force to overthrow an established habit, let me here, at the hazard of wearying the reader,

venture to reason upon the matter. The uterus is principally composed of white muscular fibre, upon which structure heat has a sedative and cold has a stimulative action. The members of our profession well know this fact ; and the reader, who can hardly be unacquainted with the colic, may in that affection find a proof to convince him of its truth. Cold water will bring on the belly-ache. This is occasioned by a chill to the intestines, causing their muscular fibre, which resembles that of the womb, to spasmodically contract. The vitality of the muscles of the intestines is excited ; and to allay the pain, that excitability must be destroyed. Heat will effectually do this ; and hot clothes, bags of sand, or bottles, are placed against the belly for that purpose. When the suffering depends on cold alone, the relief is speedy ; and when it is dependent on other causes, the sense of comfort imparted testifies to the effect of the application. The heat allays the spasm, which the cold provoked.

Warmth, therefore, is a sedative to organic muscular fibre ; and now, let it be asked, if during labor we should seek to dispel the contraction of the womb ? During gestation the muscular coat of the uterus is passive ; but when that function has been perfected, Nature endues it with energy to expel the foetus. Upon the violence of its contractions the performance of this important office is wholly and entirely dependent. Without it the young cannot be borne ; and however painful may be its force, nevertheless, such pain is to be welcomed, and regarded thankfully. The throes may be agonizing, but it is more

cruel to check than to promote them ; for the temporary relief we obtain by causing them to cease, will certainly be purchased with the life of the animal that enjoys so dearly-bought a repose.

The shriek of the bitch during the time when a pup probably is being forced into the world, may harrow the heart of an affectionate master, and his sympathies may be wrought upon by beholding the convulsion which stretches every fibre of her frame. The sounds may grate upon the ear, and the spectacle may be terrible to look upon—for in dogs I have seen misery so powerfully exemplified, that I do no wrong to any man, when I suppose the picture would be piteous to his humanity—but it is not charity which would put a termination to the pangs. Place the bitch, then, in a warm bath, and the appearances almost instantaneously are changed. The animal rejoices in the ease which a cessation of torture produces. No doubt she, for the time, luxuriates, and her face expresses the sense of happiness she then enjoys. But her fate is with the pleasure sealed ; and she obtains a momentary ease to meet with a lingering, or perhaps a frightful death, for I have known inflammation of the womb to follow the use of the warm bath. The use of the warm bath is, during labor, at best a mistake generated by ignorance ; and unfortunately it is one of those errors which can rarely be afterwards redeemed ; for the weakness it induces is so great, that the tonicity required in parturition is destroyed ; and this no medicine can restore.

Another common failing in veterinary practitioners is, a belief that the ergot of rye, or *secale cornutum*, acts upon the dog as a direct uterine excitant, and thus promotes the parturitive function. In this belief, however, they are not single. Many writers speak with confidence of its operation upon the animal. The accounts are positive ; and I would not lightly place my unsupported testimony to the fact against a host of authors who can be suspected of no motive to misstate. The gentlemen alluded to are authorities of such weight that a strong conviction of the truth is required to make me advance, against such and so many witnesses, my single word. The reader must, however, take both for what they are worth ; and remember the truth is not the less true because there may be but one humble individual ranged upon its side. It is not my intention to say the authors who speak decidedly concerning the action of the ergot on the bitch had no grounds for the statements they advance. I should not be justified in making so gross an assertion ; on the contrary, I believe sincerely they saw all which they narrate ; but, nevertheless, I am prepared to maintain that *secale cornutum* is not an excitant to the uterus of the dog in that sense which would warrant the veterinary practitioner in regarding it as a lawful agent. To be so esteemed by such persons, it should be both safe and certain in its operation. It should not only possess a chance of doing good in one direction, but it ought to be attended with no probability of doing harm in another way. It may, in the hands of

others, have caused the uterus to contract, and thus have favored parturition, or have brought about abortion. I have seen it do neither, but I cannot say it has never thus acted ; I am in no position to prove the negative. When I have given it to the animal, it has disordered the stomach and induced vomition. The dogs I tried its action upon might possibly have been bad subjects for experiment, but I am not aware that they presented any peculiarity. In every case that has passed under my observation, *secale cornutum* has been injurious ; and I fear lest it may be so, when employed by others ; I, therefore, discountenance its use, declaring the custom of exhibiting it with a view to quicken labor to be dangerous. I have used it as an emetic, though rarely ; as, for ordinary circumstances, there are preferable agents at command ; but for some time I have abandoned its employment as a parturient for the bitch.

To reconcile, in some measure, the opposite opinions, and explain the probable source of difference, let the reader consider the possible conditions of the animals I and others have subjected to observation. The medical man, when experimentalising upon a dog, generally buys the animal ; and as he merely wants a life to practise upon, he does not give money to procure beauty or high breed ; cheapness is an object with him ; and any unfortunate straggling brute, that can with impunity be trapped, is sufficient for his purpose. Such unhappy creatures are to be caught roaming about the country ; perhaps poorly fed, but strong and low-bred curs.

The dogs I am called to are not of this kind. They have been tenderly fostered, and generally their health has been deteriorated by the excess of care bestowed upon them. They are high-bred animals, and their sensibility is equal to their caste. My object, also, is not to play with life, but to save it; and that at which the medical man would laugh, I have reasons to regard with a serious countenance. Therefore, the accident which to me would be most important, might to others be so trivial as to deserve no notice, and even to excite no remark. However, supposing no accident to occur, the vigorous and low-bred mongrel might well endure that which a delicate and high-bred pet could not sustain. The stomach of the one being strong, would retain that which should induce violent spasm in the morbidly sensitive organ of the other. Dogs, it is true, are but dogs; yet, as a group, they present such varieties that there can be many things asserted of them which shall be true or untrue as applied to individuals.

Consequently, when I, writing of medicines as applied to certain descriptions of dogs, assert a particular agent is not in its action such as various writers have described, it is just possible I may not contradict the declarations previously made.

We may probably be both speaking of our knowledge only of really different things. Nominally the creatures we each observed were dogs; but though they were the same in race, in capabilities and bulk, they were perfectly distinct. The dog of the pharmacologist is a kind

of beast I know nothing of; I am ignorant—entirely and totally ignorant—of the creature that Magendie and other respectabilities report of. As to the tales told by the French physiologists, I confess an inability to credit one-third of them; and from the list of those narrated by English physicians, I am obliged to make a very wide selection. My unfortunate capacity for incredulity in this matter has been educated by a professional acquaintance with the animal; and gentlemen must pardon me if I am disposed to think, they who are not ashamed to publish their wanton disregard for life would not be very tender with respect to a mere report about the creature whose suffering they despised. Where sympathy is dead, the conscience cannot be very acute.

I have yet another custom here to deprecate; and I am sorry to add, it is one which books and teachers equally countenance. I allude to the employment of instruments in parturition, without any rule being pointed out as to the time when such aids are necessary. Hundreds of bitches are murdered by the misdirected efforts of Veterinarians; and of the brutalities resorted to by other persons, I designedly take no notice. Such fellows—mere pretenders—are below the contempt of every honest mind; and my indignation passes over them to face the persons by whom their interference is permitted. It is horrible to think of the amount of torture which man's favorite animal is hourly subjected to, through the culpability or weakness of those who should,

in gratitude for the poor beast's affections, be cautious to protect it.

Poetical as the dog is at all times, I know of no circumstance that develops more pathetically the disposition of the creature than that of pupping. At such a time, the bitch in her agony seems to trust more confidently in mankind. Animals that at other periods have allowed no one to approach them, at such moments have seemed to welcome me, and have appeared to comprehend the motive which brought me to their sides. To be examined they submit; and the pain it will often occasion may cause the animal to cry, but it draws forth no sign of resentment. The eyes are fixed upon the operator, as if to tell him of the suffering, and entreat for his sympathy. The expression of the face is mild and even plaintive; but, if possible, still more appealing are the endeavors the creature almost invariably makes to assist her attendant's designs. She seems, by some process that I cannot otherwise than consider to be a mental one, to comprehend human motives, and to more than appreciate our intentions. Her gratitude now would appear to be intense, and her confidence to be boundless. Where I have reluctantly been necessitated to resort to force, the dragging of a dead pup through a swollen passage has produced the pain which brought a sharp shriek from the animal; the agony has been such that even the fortitude of the canine parent could not silently sustain; and under its almost maddening influence, the head has been turned instinctively to bite. The natural im-

pulse, however, was never fully gratified ; the nose has touched my hand, but the jaws have closed before they grasped it. I have then distinctly felt the snapping motion, and plainly heard the teeth rattle as they quickly hit against each other, but they have never injured me. The dog could not repress the natural instinct ; but though the hand was against its mouth, the noble beast has bitten the air.

If men knew more of dogs, the animal would be more esteemed. The persons who pretend to dislike them are always ignorant of the creatures. It is impossible for human beings to see much of, and be acquainted with, these despised brutes, without becoming their admirers. To like dogs denotes no peculiarity of taste or strangeness of disposition ; for he must be incapable of appreciating natural goodness, who can observe these animals and not grow fond of them. There is no mental sympathy between a shrub and ourselves ; yet a passion for flowers is pretended to by many who cultivate a horror of the canine race. Both feelings are affections, and a person of good sense would be ashamed to acknowledge either. Flowers are sweet and pretty, but man cannot love such things ; whereas, between us and dogs there can be a positive bond of affection. In this world no one should be proud of disliking anything it is possible for him to love, or indulge a hatred towards any life that can adore him.

I have too many reasons to be grateful for the generosity of the brute, not to feel warmly toward it. There is

no day my hands are not spared, for they are constantly exposed, and never protected; and I should long ago have been torn to pieces if the canine race were legitimate objects of dread. Therefore I merely discharge a debt, when I assert the magnanimity of the creature; and it is a duty on my part to do all in my power to benefit the despised brute. With that object I speak most unreservedly, in condemnation of the way in which instruments are employed during parturition. Many various inventions are sold in shops; and of these, the great majority are very dangerous. Of themselves, very few indeed are safe, with any skill; and most are seldom needed. In the mode of employing them, they are almost sure to do injury; for in ninety-nine cases out of every hundred, they are introduced much too early, and in the hundredth they are used with unnecessary violence.

Before any instrument is employed, the pup should be within the pelvis. The forceps sold in shops are made with the intention of dragging the foetus from the womb; and one of the difficulties the practitioner is supposed to encounter in parturition of the bitch, is taught to be the impossibility of hauling the foetus from the horn of the uterus. One pup generally occupies the body of the womb, and the rest of the litter are located in the horns. That is their natural situation; and as in the gravid state the length of the horns is greatly extended, of course some occupy a place far within the abdomen. The length of the horns, however, though supposed to constitute the only obstacle, is not the single cause which pre-

vents the pup being reached by instruments. The horns, in consequence of their greater length, become bent, or folded upon themselves; so that an instrument which should drag the pups to light, where more than two or three are present, should be made to pass forward in the first instance, and then be constructed to take a backward direction. Those who invented these instruments to



THE GRAVID UTERUS.

deliver bitches with, would seem to have been ignorant of this necessity; and I here mention it to prove how perfectly inadequate such things are for the purpose intended.

Before any instrument is employed, the pup should be within the vagina. This is a rule that can hardly be with impunity violated by the generality of practitioners. Simple and brief as may be the direction, it is one that only on rare occasions may be safely disregarded; and of the exceptional case, mention will be made hereafter.

The pup must be within the passage ; and not only there, but so there, as to seem impacted, before assistance by means of instruments is necessary. The largest fœtus can, in almost every case, proceed thus far ; and where it is of too great a size to come so low, any interference would be desperate ; for then it must be of such a magnitude as to destroy the probability of delivery being accomplished.

When the pup has not entered the pelvis, the practitioner may be assured the obstacle is not created by the disproportioned size of the young. The labor either has not proceeded far enough, and time is required for its completion ; or the uterus is feeble, and stimulants are wanted to invigorate it. The largest fœtus can be moved by the womb ; so the size must be an impediment only to its passage through the vagina. There is therefore no mechanical hindrance before that part has been reached, and no mechanical assistance at an earlier period is imperative.

When the veterinarian is called to a labor that has already commenced, and perhaps been some time about, he directs his first attention to the orifice. If the perineum looks unnaturally distended, so large as to be remarkable, the presence of a pup in the vagina may be concluded ; and here he must know how to act with decision.

If the throes are on, and strong, though evidence of pain be heard, we must not be too quick to interfere. If there be anything like a bladder protruding from the

vulva, nothing whatever must be done. In easy births the pups invariably come into the world enveloped in their membranes, and thereby their egress seems to be greatly accelerated. If these burst, or are broken, the delivery is thereby rendered more difficult. The membranes consequently, if protruding, should not be touched. Some persons, I know, seize them under an idea, that by pulling at these, or at the cord, the foetus can be brought away. The notion is fallacious. With the first or second pup the membrane may be visible; and, nevertheless, the labor may not then have proceeded far enough to detach all the placenta. The entirety of the caul, or water-bag, denotes that the foetus is alive; and it also shows that Nature is proceeding to accomplish, in due time, her offices.

The position which the bitch assumes during labor also deserves to be noted. While she remains within her bed, and continues lying upon her side, however tedious may be the labor, there is little reason for apprehension. A few cries vented when the throes are present, or a moan or two emitted when they are coming on, may be expected, and deserve little observation; but when the bitch gives forth sharp, short exclamations, leaves her house or basket, and places herself in the attitude she takes when voiding her fæces, there is cause to conclude something wrong, and requiring immediate help, has taken place.

Most authorities make mention of what are called wrong presentations; and such are very commonly met

with in the cow, mare, and the larger animals ; but I have never known a case of false presentation in the bitch ; and I am led to conclude that the authors who narrated such cases, drew upon their experience in other directions, describing imaginative possibilities as circumstances that had actually occurred. I do not well comprehend how a false presentation could take place in this animal, and I can grant the possibility of its ever having been witnessed to the first pup alone. It is remotely possible that this one should be presented sideways, though highly improbable it could take such a position. After the womb has expelled the first of the litter, the body of the generative organ contracts ; and all the others must pass through it in a line favorable to the birth.

It is of little consequence, in the young of the dog, whether the head or tail be first born. Examples in both directions are always witnessed in every puppying. So likewise is it of small importance how the legs are placed, though of course delivery is favored by their being properly arranged. At the time of birth, however, the bones of the pup are but partially consolidated ; and that circumstance causes them not to offer those serious obstructions which they are found to present in other creatures. The gelatinous mass readily takes the form required for its expulsion ; and the practitioner has little reason to perplex himself concerning those particulars which in the calf or foal he knows to be of vital import.

The principal obstruction to birth in the bitch springs

from the weakness of the creature. To this its sufferings, and the too frequent tediousness of its labor, are to be mostly attributed. When there are evident signs of debility—shown by the throes having subsided, and further evidenced by no symptom of their reappearance being witnessed after three or four hours' watching—from a teaspoonful to a table-spoonful of brandy, mixed with sugar and cold water, may be administered ; and in half an hour repeated, if it should have no effect. This I have seldom found to fail, and never have I known it to do injury ; wherefore I prefer it to the ergot of rye, which in my hands has been uncertain and injurious. Patience, however, is more often needed, than stimulants required ; and before the latter are resorted to, the symptoms of debility ought to be recognised ; for without these be perceived, the passive condition of the uterus deserves no immediate attention.

When the throes are on, the efforts may be assisted. This is best done by placing the hands under the abdomen, and with them making pressure whenever the straining appears. The hands, however, must not be held so long as will let them get hot ; for, by communicating warmth, more harm is done than the benefit afforded is likely to compensate. The object in placing the hands under the belly is, to brace and give support to the abdominal muscles ; which, in the dog, are naturally weak, and in the bitch during gestation always become attenuated.

Cold cloths to the abdomen will also in some cases—

but not in all—excite the uterus, and bring on vigorous throes. The coldest water I could procure is that of the temperature employed by me; and it has seldom, to my knowledge, been otherwise than beneficial.

When the birth is long delayed, the bladder and rectum should be examined and emptied of their contents by means of the injection-pipe and catheter. To draw off the urine of the bitch is not difficult or dangerous. A knowledge of the situation of the meatus, or termination of the urethra, is necessary to the operation; and this is best obtained by dissection. It lies within the pelvis, a short way anterior to the brim, and above the symphysis of the ischium. I know that while endeavoring to explain, I am here making use of words which will to the majority of readers convey no meaning; nevertheless, I cannot be more clear. I have, however, in a communication to the *Veterinarian*, entered into this matter; and I here extract from that journal part of a paper published in the number for January, 1849:—

“With regard to the bitch, I always let the animal stand upon her legs, simply having an assistant to hold the head and engage the attention of the creature. The meatus lies about half an inch or two inches within the pelvis, the distance varying with the size of the dog. The line of the urethra is rather forward than downward, though, of course, in both directions. After having once or twice passed the instrument, it is surprising how very readily this conjectured impossibility is performed. I think so little of the difficulties, that I have no inclination to dilate upon the few precautions which are requir-

ed to remove them. I may, however, here state, that, when grasping the penis of the dog, a handkerchief or a portion of tow will be required to render the hold secure ; and the wire should, before the catheter is introduced, be withdrawn, while it ought to be moistened with olive oil to facilitate its passage, as the canal is not unfrequently devoid of mucus."

When the pup is partly born, and its passage appears to be delayed, either through the feebleness of the throes or some mechanical impediment, assistance should be afforded. The restlessness of the bitch will, perhaps, be the most proper indication ; and it is the more necessary to be cautious in our interference, as, on account of the size of the animal, the aid we can afford is limited. When a paw is to be seen, this may be laid hold of ; but not without the fingers being covered ; for, as the limb is slippery, the force intended to secure it would hardly render the grasp confirmed, and might crush the member. The osseous structure in the pup at birth, as I have already stated, is not consolidated ; and all other components of the body are in a condition proportionally immature. The tiny being, when first brought into the world, is little better than a living mass of pulp ; and on that account, it must be gently handled. Far less violence than might be supposed requisite to do so, will dismember it ; and no vast force is needed to pull even the head from the trunk. Aware of this, the efforts intended for the delivery must be regulated by the power of the substance to endure them. The practitioner must take a

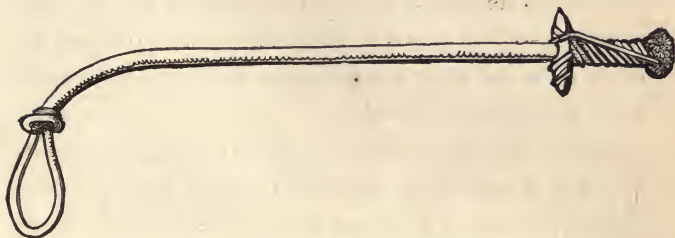
thin, soft cloth, or what is better, his silk pocket-handkerchief, and with this lay hold of any part that can be grasped. If but one leg can be got hold of, that must be secured, and an attempt made to bring forward the other. The two being obtained, gentle force or traction may be through them applied while the throes are on. The dragging must not be strong, as, if the pup be alive, it will be injured; or, alive or dead, it may be torn to pieces.

A broken pup, as the fœtus is called when any part of it has been pulled off, is always more dangerous to the life of the bitch, and much more difficult to get away, than one that is entire. The impediment bears relation to the extent of the mutilation. Thus the separation of the head is more serious than the deprivation of a limb; for, let not the reader imagine that in the dog, as in the cow or mare, embryotomy by means of a knife can be successfully resorted to. I have endeavored sometimes to perform craniotomy, or to remove the brains of the fœtus, hoping by so reducing the bulk of the head to facilitate the delivery; but the result has displeased me, and I no longer follow the practice. The pup, if to be got away at all, will be most easily removed entire; and that it may not have its integrity destroyed, the assistance given to the mother must be temperate. Every little aid is a help to the labor; and knowing that, we must be content if we are denied to accomplish all. The traction, assisted by a secure grasp, should be steady; and the lips of the part should at the same time

be as much as possible pulled open with the fingers of the free hand. Mild, soothing, and encouraging words will, during the operation, be of every consequence ; and it is of importance that, in every particular, the animal should be humored to the extent of possibility. Restraint should be enforced only where absolutely necessary ; and when it is so, the creature will strangely comprehend the reason that compels, and patiently, or at least without resentment, submit to its endurance. A harsh word, however, or a blow, or both together, too frequently gratify the impatience of the practitioner, and, at this time, often dispel the throes on which the birth depends. The dog is ever sensitive to correction ; no living being more acutely feels rebuke or praise ; and its excitable nature, lighted up by the pains of labor, cannot then endure unkindness, and should receive our sympathy. Good language, no hurry, and a rejection of all violence, will do more for a desperate case than all the drugs in the pharmacy, or all the tact which ingenuity is possessed of.

To secure the legs, when they can be felt, Blaine recommends a skein of worsted. I have not found that article of any use whatever. If introduced into the vagina, it soon becomes moist, adheres to the finger, and cannot be detached from it. If, however, applied in a loop or slip-knot round a paw, I have known it cut through the bone ; and its only advantage lies in the fact of its little tendency to come off when once fixed. Even in that respect, however, it sometimes disappoints,

and I consequently no longer use it. To supply its place, I had the following very simple instrument made; and it answers every intention, although it is but seldom required:—



PARTURITION INSTRUMENT.

A tube of polished metal is at one end curved to suit the line of the pelvis, and at the other it is grooved, and also has a small cross-bar. Into the tube a piece of zinc wire is introduced, so as to double and form a loop at the bent extremity, the ends of the wire coming forth at the other. One of the ends of the wire is twisted into the groove, so as to render it fast; and that being done, the instrument is prepared for use. When required, it is introduced with the loop of wire upon the point of the finger, and the paw it is desired to fix being felt, the finger is withdrawn, and the instrument moved forward. The free end of the wire is then pulled to render the hold secure; when it is twisted round the projecting bar and made secure. By employing a pliable wire, we gain those advantages which arise from its not becoming flabby and adherent when the part is moist; but it retains its form, and is therefore more readily directed.

The tube assists us in guiding the loop, which, being once fixed, can be made secure, so that traction does not afterwards further tighten it. The danger, however, is not entirely removed; for, if undue force be used, the wire may do injury as well as the worsted; and for that reason I seldom resort to it, unless assured the pup is dead, when the pains are generally slight, and additional force is often necessitated.

When the pup dies before birth, the membranes in which it is enveloped generally rupture; and by introducing the finger, the foetus is to be felt without these interposing. The mere rupture of the membranes, and the emission of the meconium—a dark, greenish, semi-fluid substance—will not alone convince us of the fact; but, if the labor has been prolonged, if the throes are almost lost, and if no motion can be detected in the pup, we may conclude the life has departed.

Dead pups are more difficult to deliver, and stimulants are generally needed to promote their expulsion; but manual help is to be given with caution. Youatt speaks of working hard, till his nail was soft and his finger sore, for two hours at a time; and that author tells us the passage was, by his industry and frequent examinations, so much swollen, that only with considerable difficulty could the finger be passed.

The humanity which shines in every wish that writer ever penned, and the purpose of all his teaching, assures us he thought such a proceeding was not only imperative but praiseworthy. He was, however, a good man actu-

ated by an imperfect knowledge. Let no one follow his example ; but be passive till the time for action is ascertained—and it is of no use to grope for it. Frequent examinations are injurious ; the more seldom they are made the better ; for, if undertaken only when the judgment sees a chance of hope, no harm will be occasioned. Under every delay, therefore, have patience ; for often the pup which originally would resist every attempt to bring it forth, will, after it has been dead a few hours, be delivered with a facility we could not anticipate. If the parts are not irritated and rendered dry, there is little to be apprehended ; but if this be done, inflammation of the uterus is apt to be induced, and should that occur, it is of little consequence to the life of the bitch whether the pup be delivered or not delivered.

From the pup, whether it be dead or alive, we are not to look for those signs which denote there is a pressing necessity to accomplish the delivery without delay. I have known a foetus, after being ascertained to be dead, to be retained four days, and the bitch to survive. Instances of the dead pup remaining in the womb a day or two are very common ; and, if we had no other proofs, these would be sufficient to convince us there need be no immediate hurry. When, however, the bitch becomes restless, gets in and out of her bed, pants, staggers, refuses food, drinks largely, and is shortly afterwards sick ; when the tongue becomes dry, and the pulse grows quick and thin, or unnaturally hard and strong, there is danger, and at every hazard delivery must be

accomplished. There will, however, then only be a distant chance of success; and where these indications have been remarked, the life of the mother has generally been lost. If a portion of the litter has been born, and, on the appearance of the symptoms just described, the pups refuse to suck, and when placed to the teats turn from them, the termination will be fatal. The milk seems to have lost its inviting properties, and to be rendered disgusting by the approach of death; and the sign is as conclusive as the departure of vermin from the carcase of an animal.

Forcible delivery is to be accomplished by every means in our power; for it is undertaken only when hope by ordinary process is despaired of. Forceps of any kind, however, are to be employed with extreme care. These instruments are always dangerous in the bitch; as we cannot see, and can but imperfectly feel, so there is little guide to their proper use. The crochet, a blunt hook—and for the dog it can hardly be too blunt—is to be preferred. As I have before submitted to the public my opinion of this instrument, I here extract from a paper which appeared in *The Veterinarian* for February, 1847:—



THE CROCHET.

“I was obliged to meet my pupils in the evening, and was not sorry to leave a case which had now, in my

mind, become hopeless ; but as I walked, I could not forbear thinking of that which had occupied most of my attention during the day. The different instruments employed to facilitate the labors of different animals passed in review before me ; but some were not applicable to the dog, and others could not be manufactured with sufficient speed to benefit my present patient. The crochet, used with such power by the human practitioner, seemed the one most likely to avail ; indeed, it had often before occurred to me, that an adaptation of this instrument would, in our hands, be of infinite service ; and, after I had dismissed my class, I hurried to procure what I had conceived would be useful. Mr. Perry, to whom I applied, had a human crotchet in his shop, and this he consented to alter according to my directions. I stayed till the alterations were completed, and by eleven at night reached home, to put the adaptation of the crotchet to the test. It answered beyond my utmost expectation, and I was enabled to bring away the whole of the contents of the womb with comparative ease. Four pups were extracted ; and while I compared them with the little animal from which they had been removed, it required the evidence of my senses to convince me that the disproportioned mass had been forced through the narrow passage of the Italian greyhound's vagina. The pups were all dead. Each bore the well-marked character of the Russian, and by their size indicated their sire : nor was that size decreased by their having been retained a week beyond their usual period.

“ So far my labor was accomplished ; but the appearance of the bitch indicated that all had been done to little purpose. The pulse began to decrease in number, and, nevertheless, continued hard and jerking—the eyes became fixed—the jaw closed—the head pendulous—and

all the symptoms of approaching death were exhibited. I tried to support the system; but the poor animal died in spite of every attention, and the examination after death showed the womb to be intensely inflamed.

“It was with some anxiety that I looked for injuries and abrasions, scarcely deeming it possible the violence I had necessarily employed had not lacerated the delicate structure with which the instrument had been in contact. Not a mark which I could attribute to the crotchet was to be discovered. I have seen fearful wounds made by the forceps used to deliver the bitch; but here, in the most desperate case of the kind which I had ever undertaken, was not a scratch or a bruise to be detected.

“I have since confirmed the indications of utility which were given by the crotchet on the first occasion of its employment; and had I not received such proofs in its favor as appeared to be conclusive, I should, perhaps, on the results of a few cases only, have hesitated to introduce it to general notice. Besides the instances before alluded to, I have employed the instrument on four occasions—three times in my own practice, and once at the request of a practitioner, whose name it is desired I should conceal. Two of the cases were successful, so far as the bitches were concerned; one, which was evidently sinking when brought to me, was delivered of a pup in a decomposed state, and died five hours afterwards, the post-mortem displaying acute peritonitis; the other, which I attended to yesterday, was alive when I last saw it; but I am of opinion its hours are numbered. The pulse is hard, but not quick—the animal restless—and the eye dull: worse symptoms can hardly be present. The poor beast had been left too long unassisted for help of any kind to be of much avail.

“Of the pups brought forth by the aid of the crotchet,

the majority were dead; indeed, though safe to the mother, the instrument is apt to be fatal to the offspring. The numbers stand thus:—Dead when extracted, 7; mutilated when brought forth, and immediately destroyed, 1; alive, 1. Thus the proportions are as 8 to 1 against the probability of saving the pups; but it must be remembered that the calculation is made from the cases of which the majority were, by previous delay, rendered hopeless, and under fairer circumstances the result might have been different.

“I will now proceed to describe the crotchet, and explain the manner in which I have employed that instrument. It has been long known to the human accoucheur, but by him is not employed save under certain conditions. A piece of stout steel wire constitutes its substance. The wire, about twelve inches long, is flattened at one extremity, and both ends crooked and made perfectly smooth or blunt, the flattened hook being the larger of the two. For the dog, the instrument must, of course, be proportioned to the passage into which it is to be introduced; and as the pup, in consequence of the weakness of the abdominal parietes in the bitch, often is felt lying below the level of the symphysis, a dip or lateral bend is given to the hooks.

“So simple is the crotchet, which ought to be highly polished, in order to secure its being perfectly smooth. It is first warmed and greased, then introduced with the index finger of one hand, while the other guides the instrument into the womb. The fœtus is to be first felt, and this is the more readily done if an assistant supports and compresses the abdomen. When the finger has ascertained that the pup is favorably placed, the hook (and I generally use the flattened extremity of the instrument) is to be pushed forward and then retracted, until

the operator is aware that a firm hold has been obtained. The purchase being secure, the finger is to be employed to keep the fœtus from escaping, by pushing it against or towards the point of the crotchet, and holding it there. Traction is now made steadily and in the proper direction ; and the assistant at the same time, by manipulating the belly, facilitates the delivery of the bitch, which should be in a standing position—not upon its back.

“The directions are not very complex, but they must not on that account be disregarded. By introducing the finger, and taking care that its extremity corresponds with the point of the instrument, a great object is gained by securing the pup more firmly : yet there are other advantages also obtained by this mode of operating. The head of the fœtus is generally too large for the vagina, and hence the difficulty of its expulsion ; but by the employment of an instrument which is simultaneously to pass, we appear to be increasing the obstruction : however, by compressing the head with the end of the finger, it is in some degree forced to conform to the diameter of the passage, which the gelatinous development of the pup at the time of birth readily enables it to do. Moreover, the hazard of injury being done, if the instrument should lose its hold, is guarded against ; for should the hook slip, the point would be received upon the end of the finger before it could catch the soft parts. However, the operator will feel the hold giving way long before it is entirely lost, and will be enabled to rectify the occurrence in the majority of cases before there is a chance of accident. The finger, therefore, becomes a sensible guide to the operator, and by its employment the traction is rendered more firm and steady. But above all, care should be taken to have the instrument perfectly blunt, and the beaks of the hooks not too

long. A sharp point might, at the first glance, seem more likely to answer the purpose in view; but its employment would be attended with danger, and on being tested, it would be found more apt to tear away. In fact, the sharper the point, the less firm would be the hold, since the substance to be secured is somewhat of a pulpy nature; whereas, by using as broad and flat a point as possible, the force is exerted on a larger surface, and the grasp is proportionably the more likely to be retained; the object being not to rend the foetus, or tear it away, but to gently pull it through the vagina, using only so much violence as the judgment assures us is imperative for the accomplishment of the purpose."

On reflection, I am inclined to think the measures adopted in the case narrated above were somewhat more precipitate than they ought to have been. Now, I should have taken more time; and the success does not assure me that the haste exhibited was fully warranted.

It is not always easy to ascertain when the whole of the pups have been removed. The last in the womb, always occupying the extremity of one of the horns of the uterus, may by an inexperienced practitioner be overlooked. Most persons seek to learn whether the labor has been perfected, by inserting the finger up the vagina; and they who base their opinions upon an "*examination*" of that description will often be deceived. External manipulation will best lead us to the knowledge we desire to gain; and when the hand is properly directed, an approach to certainty can be obtained. The pup to be felt through the walls of the abdomen is an uneven

body ; the inequalities caused by the limbs being detected. After parturition there is generally one thing that may be mistaken, which is the contraction of the body of the uterus. The first pup born occupied that situation, and on its expulsion the part of the womb it filled narrows, becoming thick and somewhat hard. Under the fingers, it conveys the idea of a solid substance, and it may be imagined to be another fœtus. It is too frequently seized when the forceps are ignorantly and violently employed. The womb has been repeatedly forcibly dragged forth, and its integrity destroyed. A mistake of this kind is fatal. The rupture of the uterus is followed by sickness and a cessation of the throes ; while the hemorrhage from the laceration induces inflammation that destroys the life ; therefore, when forcible means are determined upon, extreme care is required, and forceps, as a general rule, had better be dispensed with. As regards other means—such as the tube and wire, the crotchet, the supports to the abdomen, and the employment of stimulants—these must be regulated by the circumstances of the case.

The appearance of the bitch will generally denote when the births are completed. She, after the last of the litter has been born, seems to be much rejoiced, and by her manner indicates she has no more business at present to transact. She curls herself round, draws her puppies close to her, makes the bed comfortable, sees that all her family are in order, and then composes herself for a comfortable sleep. The meaning of her

actions is at this time so conspicuous, that I have repeatedly lingered to watch them ; and he who has never witnessed her conduct on such occasions, might be entertained by observing it.

The animal subsequently requires little attention, beyond a change of bed and a fair supply of nutritive food. She does best when least noticed ; but it is well to see that she takes a sufficiency of exercise. On the following day she should be taken out ; and on every day after that she ought to be about pretty much as before. Some bitches, however, are such devoted mothers as to sacrifice health, and occasionally life itself, to enjoy the pleasure of being with their young ones. This excess of affection must be controlled ; for if not checked it will seriously injure both parent and offspring. All animals, however, are not thus distinguished. Some bitches cannot be induced to suckle the pups they have given birth to ; and others, though less frequent, will eat their progeny. The disposition to desert or destroy their young seems to prevail among the parentage of this world. In the female of the dog the maternal instinct is most powerful ; but under certain conditions of the animal's body, the natural impulse seems to be perverted, and she takes the life she would else have perished to preserve.

It is painful, knowing this, to reflect that on his own species man inflicts the highest punishment, for an act that possibly may be, in the human being as in brutes, the consequence of a mental excitement accompanying

the period of parturition. Women, when not in distress and otherwise afflicted, rarely indeed are guilty of infanticide; and I have observed annoyance or ill health proceed or accompany the like act in animals. If the rabbit be looked at, her alarm seems to change her nature; and the bitch that devours her pups will, upon inquiry, be generally found to have suffered some species of persecution. That the brain is affected there can be no doubt. The unnatural propensity is of itself a proof; but the strange appearance, and the altered looks of the creature, sufficiently denote her state. She is not then savage; her ferocity has been gratified; and she seems rather to be afflicted with a remembrance of the act she was unable to resist. She is the picture of shame; she 'slinks away at our approach, and her eye no longer confidently seeks that of her master; her aspect is dejected, but I think more with sorrow than with crime.

I would not plead for sin; but what I have beheld in dogs inclines me to think the majority of those who have been hung for infanticide were legally murdered. There is danger in admitting such an opinion; but seeing all animals at certain periods exhibit a particular propensity, it is very doubtful whether the morbid feeling, as exemplified in the human race, is really one that calls for mortal punishment.

When a bitch has devoured her young, let an emetic be administered; and should the bowels be costive, an aperient be exhibited. A little fever medicine may fol-

low; but if its effects are not immediately witnessed, tonics, without loss of time, should be resorted to. The food must be mild; and everything should be done to guard against excitement. The system requires to be soothed; for the act is always attended with general disturbance; and attention must be paid to prevent the milk from accumulating in the glands.

Some persons entertain a notion that the bitch which has once devoured her litter, will ever after retain the disposition. This is a false idea. On the next occasion, if properly treated—that is, if not persecuted, chastised, alarmed, and annoyed, but properly dieted—she may prove, and most likely will prove, an excellent mother; the very excitability which, when over-stimulated, induced her unnatural impulse, making her, when tranquil, the more alive to the instincts of her nature. I once saw this in a very remarkable manner illustrated by a rabbit. The doe was sold to me very cheap, and was in litter at the time of purchase. A week after she came into my possession, she plucked her fur and made her bed. One morning I distinctly saw a nest full of young; but looking again at noon, not a single one of the progeny was to be beheld. Some little blood and a mangled leg told their history; and the animal a fortnight afterwards was again put to the buck.

I by chance discovered, while the doe was breeding, that she had an inordinate thirst. At first it amused me to see the creature lap the water I presented to her; but at last I placed within her hutch a cup, and had it kept

constantly filled. Her desire for liquid was not speedily quenched; and it became to me a source of some pain when I reflected how much agony the craving must have caused prior to my being conscious of its existence. The next litter was not eaten by the mother. She brought them up, and they likewise did well, drinking as much as they pleased. The disposition of the doe appeared to undergo a change. From having been savage, that is, from always endeavoring to bite and scratch the hand that cleaned her residence, or even supplied her table, she became gentle and familiar, allowing her person to be caressed, and letting her progeny be looked at. She was at last as good as she was beautiful; and I parted with her for a sum exactly four times that which she had cost me.

After a bitch has pupped, there always is from the vagina a discharge, which rarely ceases before a week expires, and sometimes flows forth for a longer period. Some gentlemen of the "fancy," as the dog breeders term themselves, boast they know how to check it; and to what extent their knowledge may reach I cannot pretend to say. I have been requested to perform such an office, but hitherto I have not attempted to fulfil it; and I should be very sorry to do so, even if I were certain there existed the means to arrest the exudation. It is natural; if the animal be left alone, she will be sure to perform the offices of cleanliness, and to do everything her state requires.

For the first week the bitch is very attentive to her

family ; and as it gives her pain when one is taken up, it is better not to handle the pups more than is absolutely necessary. She should be well fed ; not crammed, but nourished ; and she will require more food than formerly, for there are many mouths to feed through hers. The quantity of support she needs may be conjectured from the rapid growth of the pups.

A small bitch of my own had a litter of four. The mother weighed seven pounds six ounces ; and between the second and fourth weeks the young ones daily added one ounce and a half each to their bulk. It would require some amount of milk to supply such a quantity of flesh ; and we have also to remember that, during the rapid growth, the process of consolidation is simultaneously going forward. Good nourishing food, sufficient in bulk, is absolutely imperative ; for if the pups be stinted, the dogs will assuredly be weak.

A strong bitch may be able to bring up as many young as she can produce at a litter ; but the animals of the smaller or more choice breeds are seldom possessed of such capabilities. The very diminutive will not generally rear two pups without suffering ; and four are a very heavy drag upon the majority of the animals kept as pets, even though they be in no way remarkable on account of size. Three, perhaps, is the average number the larger favorites can nurture.

When, through a desire to get as many specimens of a particular breed as possible, a delicate bitch is allowed to suckle all the members of a heavy litter, fits are the too

probable consequence. The animal becomes so much weakened by the continual drain upon her, that the whole system is debilitated, and the brain shares the general disorder. Previous to this being perceptible, the animal may be observed to pant violently when her young are sucking; and instead of cuddling to them in a manner expressive of her delight, she stretches herself out, and frequently exhibits uneasiness by shifting her position. At length she breaks away from her offspring, which appear to be dissatisfied with her departure. She does not continue quiet after her escape, but seeks ease in vain, has a vacant expression of countenance. Affection, however, impels her to return; and the same scene is exhibited, the pups seizing upon her, and having no regard for her exhaustion. The little things are hungry, for the source of their nourishment is failing; and thus the demand is the greater, just as the supply becomes the less.

At length the poor bitch pants, staggers, falls, and writhes in convulsions, which on an average continue about five minutes. The struggle subsides, to leave the animal in a sad state of weakness. The pulse then is quick and feeble; the pupil of the eye is dilated; and if the teats be tried, the milk they ought to contain will be found absent.

For the fit itself little need be done. While they are violent, an injection of ether and laudanum may be thrown up; and when the consciousness is in some degree recovered, a dose of the same, with from a quarter

of an ounce to an ounce of sherry may be administered. Afterwards a few tonics may be given ; but the mother must never be permitted to visit her young ones as before. Either a foster-parent must be found (and a cat will rear a small pup very tenderly), or the litter must in part be brought up by hand.

This last is more troublesome than difficult to do. The pups want to be fed early and late ; consequently, they must be taken into the bed-room ; and when the feeding time arrives, the soundest sleeper will be reminded of his duty. A bottle, such as is used for infants of the human kind, must have a sort of nipple made of wash-leather fitted to it. The leather is to be pricked all over with a fine needle, and within it is to be placed a small piece of sponge to give substance and form to it. There is need to do that, because the pup when it sucks wraps the tongue round the teat ; and unless the body it thus grasps has bulk, it cannot extract the liquid. This, therefore, being attended to, the little creatures very soon learn their lesson, and all that is subsequently to be done will be to hold them to the bottle, and the bottle to them. Each pup occupies from ten to fifteen minutes at a meal ; and they may be allowed to decide the quantity that will do them good, unless one should obviously be morbidly gluttonous, when the indulgence of its appetite should be restrained.

During the night the bitch must be kept away from her hungry tormentors ; but in the day-time she may be allowed to go to them every time after they have been

fed; and she may remain to enjoy their society for half-an-hour on each occasion. The small gluttons, though full of cow's juice, will nevertheless find appetite for such a luxury as mother's milk; but their energies being blunted, they will have power to do no more than to prevent an accumulation within the glands. The little, however, which they can swallow seems to do them much good; for after this manner I have brought up many pups, though, when I have attempted to rear them wholly upon cow's milk, success has not always rewarded my care.

There is only one circumstance needed to be pointed out when pups are brought up by hand. The sponge and leather of the false nipple is apt to become sour; and therefore, after they have been used, they should be kept in water rendered slightly alkaline with the carbonate of soda.

At three weeks old, puppies may be brought to lap a little; and they not only learn quickly where their bellies are concerned, but they never, like other children, forget what they once acquire. After a month a little scraped meat or boiled rice may be added to their diet; and by five weeks old they will feed themselves. Therefore, if the trouble be great it does not last long; and to those who can make an amusement of the business, the pleasure repays the labor. I do not know whether feeding pups is quite as agreeable a pastime as killing birds; but I am sure it is far less dangerous to him who follows it; though the difference of name given to such recrea-

tions may, to weak eyes, invest them with very opposite attractions.

At this place it is not intended to enter at length into the plan to be pursued in rearing the pups; but the method in which they ought to be weaned must be pointed out. Some persons remove the entire litter at a stated period; various dates being fixed by different individuals when the young ones can do for themselves. A pup can survive if taken from the mother at the expiration of the third week; but it must be a strong animal, or it will feel such an early separation from the source of its natural nourishment.

The stronger the pup, the more attached is the bitch to it; and I have known these animals to pine and neglect the rest, when the favorite has been taken from her. If, however, the healthy are beloved, the weakly, in almost a stronger degree, are the objects of dislike. In many breeds where the value is regulated by the lightness of the weight, the one most prized by the owner is the one that too frequently dies. The causes of this disappointment are many. Pups have neither politeness nor generosity. They scramble at their meals; and the one that is not able to contest for his share is certain to get the least. Thus the debilitated hope of particular litters comes but badly off. It is pushed aside by its brothers and sisters, whose vigorous greediness appears to endear them to their mother. For the boisterous gluttons she will accommodate her position, and fondly lick them in return for their energetic appetites;

but to the poor sickly thing she has given life to, she lends no assistance, and bestows no attention upon. She seems to be ashamed of, and disgusted with, its degeneracy; and while the others grow fat and sleek from positive repletion, it becomes thin and dirty from actual starvation. Where, therefore, it is desirable to rear the smallest of the litter, the proprietor must take care to see it properly fed. The bitch may need to be held, in order that the little one may suck her; and often have I placed her under such restraint.

In order that the small one may be nurtured, some persons have taken away from the mother the rest of the family; but this practice, though successful with regard to the life, generally disappoints with respect to the diminutiveness, which made the existence precious. Upon the abundance which such single blessedness secures, the growth is generally rapid; and it is not very long before Nature makes up for her previous stint. The better method is, to let the companions continue; care being exercised only to see that at meal-times all share alike.

The bitch, also, requires our attention to observe that all the glands are properly emptied. Puppies, like children, are apt to be fanciful where plenty prevails; and it is no very rare occurrence for a litter to combine in refusing to draw the most forward of the teats. These are situated under the sternum or breast-bone; and repeatedly have animals with young ones recently born, been brought to me, because their owners perceived symp-

toms which could not be interpreted. The animal is restless; the nose is dry; the tongue hot; the appetite is either lost, feeble, or capricious; and the dog is disinclined to move, often crying out when obliged to walk.

If the teats are examined, all those posteriorly situated will be found fairly drawn. On these the pups can take a firm hold; and as they are the most capacious, no doubt they present temptations against which the lesser glands anteriorly placed cannot compete. The smaller are therefore rejected; and will be found to be distended with their secretion. If this is removed, and, as necessity arises, afterwards withdrawn, no more need be done, but the symptoms will subside.

To milk the bitch requires only a little patience. The gland should be taken between the finger and thumb, when any degree of pressure, not designed to create pain, may be made, and the fluid squeezed out. The animal submits with pleasure to have this operation performed, and seldom moves before it is perfectly accomplished. Where any appearance of hardness is detected, the place should be kneaded between the finger and thumb; for pains should be taken to remove the coagulated milk, which is generally the cause of the induration. Frequent and thorough milking will do more good in these cases than any of the active remedies sold by chemists and dog-fanciers, for the purpose of immediately curing them.

To dry up the milk of a bitch is a duty we are often called upon to perform; but it is one I invariably decline to accept. The animal will always soon cease to yield

its secretion if it be let alone; for if dog's milk were valuable, we should in vain use our utmost art to prolong its continuance. When the pups are removed, Nature takes away that which is no longer required; but if the litter be suddenly separated from the mother, or all the young should be born dead, Nature may not immediately accommodate herself to the circumstances. In such cases, the milk should be withdrawn three times daily; a dose of opening medicine should be administered, and the food should be spare. A few days' attention will be required; but the matter, if neglected, causes much suffering, and very frequently lays the foundation for future evil.

Falling of the vagina, or membrane lining the passage to the womb, is sometimes witnessed in animals that are much confined, and consequently of a debilitated habit. Creatures so savage as to be dangerous, and which, therefore, cannot be properly exercised, are most subject to it; and I have in the greater number of instances met with it in high-bred bull-bitches of that disposition.

The reason of this is, the bull-dog ranks as an entirely artificial creation. In proof of this stands the well-known fact, that unless the breed be sedulously kept up, it is apt to degenerate, or to become extinct. Old breeders even now say, the ancient kind of English bull-dog is nowhere to be found. But take another proof. We want no anatomical knowledge or prejudice: in him formation is to be judged. Let the reader look at the head of the animal depicted on page 404. Is not the cranium a

malformation ? Do not the habits of the animal prove it to be a pampered creation ? It is not generally known, that the disposition of the genuine bull-dog is too fond. It will fondle upon any stranger ; and yet, contrary to the general custom of its race, it displays small preference for its master. It will fondle a human being as though its heart would burst with affection ; but upon the slightest excitement—often upon a sudden sound—it will fly at and mangle the hand that was caressing it. Then the hold taken by this animal is more retentive than is strictly natural. It will fix upon an object, and frequently suffer itself to be dismembered before it will let go its hold, although its master's voice be energetically raised to command it. Do not these traits bespeak the being formed rather by man's malice, than created by Nature's goodness ? Look at the likeness of the beast, and say how far it resembles the mild, graceful, and generous race to which it outwardly belongs.

It is the high, or rather perverted, state in which the breed is kept, that subjects them to accidents ; it is the pampered condition in which these antipodes to beauty are reared that renders them so liable to afflictions that do not affect the ordinary run of their kind—such as falling of the vagina. It comes on generally when heat is present, and mostly disappears when the excitement subsides. A red bag is seen to be pendulous from the orifice of the part ; and if no care be taken to prevent it, this by exposure gets injured ; becomes hard ; bleeds freely, and is difficult to return. It often presents a pitiable

aspect ; but however painful it may be to look at, there seems to be but little suffering attending it. The animal permits it to be freely handled, and does not resist even when sharp dressings are applied.

In such cases cleanliness is to be strictly observed. If the protruded membrane should be thickened and excoriated, it must be well washed with a sponge and warm



THE BULL-DOG.

water. Afterwards it may be bathed with a lotion, (made of nitric acid one drachm, to proof-spirit one ounce,) and then returned. A cold injection, composed of alum one drachm, dissolved in spring water one pint, may be used thrice daily ; and from a quarter of a grain to a grain of powdered gallic acid may be given three times a-day.

The inversion of the womb is more serious ; but it is generally more speedily restored. In the larger animals, that produce one or two young at a time, the uterus is commonly inverted subsequent to parturition ; but in the dog I have known it only when the womb had for some

period been unimpregnated. Blows may cause it ; so also may excessive weakness ; and the earlier it is attended to, the more readily will it be restored. The treatment is described in the following narrative, which was published by me in the *Veterinarian*.

“ I began by having a soft clean cloth spread upon a table, and, placing the dog on this, with a sponge the uterus was gently moistened. No friction was employed, but with tepid water the part was carefully sopped. This process was not quick. An hour and a half expired before all the extraneous matter was by it removed. This accomplished, with a pair of scissors the fibrinous tumors were snipped off. The hemorrhage was trivial ; but there yet remained marks of bruises and signs of laceration which could not be cut away. To these a spirituous solution of nitric acid—a drachm to the ounce—was applied, and the entire of the exposed surface dressed with it.

“ Knowing the peculiar form of the passage, I was able to return the womb, and met with little obstruction. Up to this point I had succeeded better than at first I hoped ; but here came the difficulty. The uterus was replaced, but how was it to be retained ? The irritability of the system would have a natural tendency to reject the viscus, and the lotion I had used was not of a soothing quality. To render the case more desperate, there was the knowledge of the temperament and habits of the animal—its manner of sitting—its mode of curving the spine to void its fæces—the marked excitability of its generative organs—and its peculiar sensitiveness to suffering.

“ To own the truth, I had done so much more than,

seeing the hardened and lacerated condition of the parts, I had in the first instance anticipated was possible, that I was not exactly prepared for my good fortune. I remained for some time thinking—and, really puzzled, requested those present not to speak. I wanted some combination of medicine which I could not satisfactorily procure. A sedative to the general system was required, but not one that should depress; as, after operations of this description, the vital powers are disposed to sink, and therefore generally require to be stimulated. I moreover wanted an excitant to the uterus. Many things were hastily thought of, and as quickly rejected; and, in my difficulty, I was at last obliged to ask advice of those about me. A bandage or harness to pass over the parts was suggested; but the almost impossibility of fixing it properly, and the mischievous ingenuity the dog exhibits with its teeth, rendered this plan obviously inappropriate. One person proposed to adopt the custom—sometimes, I am sorry to say, followed by cow-leeches—of passing stitches through the labia. The brutal and unjustifiable practice was of course rejected, and, I trust, by the members of the veterinary profession, it is never embraced.

“Fairly at my wits’ end, I suddenly determined to try how the injection of cold water into the uterus would act. I knew of no case in which this agent had been employed, and could not feel confidence concerning the consequences of the experiment; but, in despair, I resolved to hazard it. A quantity fresh from the pump was therefore obtained, and it was thrown up, being allowed to flow back. A stream of cold water was thus made to pass over the interior of the uterus, and about two quarts had been used before the animal appeared to be at all affected, excepting that the injection seemed to

induce a sensation of discomfort. At last a feeble moan was uttered, which, when another pint or thereabouts had been injected, burst into something approaching to a cry. I then desisted. The tube was withdrawn, and, hoping that the symptom of pain resulted from the contraction of the organic fibre under the stimulating effects of the cold, the animal was ordered to be placed where nothing could disturb it.

“ Having passed an hour in the company of my friend, when about to leave I requested to see the dog once more. The animal had been put into a hayloft, and I was pleasantly surprised to hear it give tongue on our approach : it came to meet us, and the change was such as I could not have anticipated. The parts had regained almost their natural appearance ; certainly they presented nothing to indicate the aspect they had exhibited only a few hours before.

“ A mild aperient was given. The animal had no other medicine, neither was any local application used. For three days a slight discharge of a blackish color ensued ; but when this stopped, the animal was returned to its owner cured.”

Hardened swellings, or indurated tumors in the teats, are very common in the bitch. They are caused by the milk being allowed to accumulate in the glands, and there to curdle or act as a foreign body on the parts immediately around it. The bitch will secrete milk, although she has had no pups ; and a virgin bitch will do so quite as actively as one that has been a mother. When heat has subsided, although no intercourse has been permitted at the period, when the birth would have taken

place the glands will swell ; and on squeezing them, a full stream of thick milk will flow forth. Nine weeks, therefore, after œstrum, whether the desire has been gratified or denied, the teats should be examined and relieved. If this should not be done, small lumps will appear. These are round, not sensitive ; but generally roll under the fingers, and appear at first to be perfectly detached, though more or less deep seated. No time should be lost in removing them ; for if allowed to remain they rapidly increase, and often become of an enormous size. Others also appear until the whole of the glands are involved ; and the extent of the implication renders an operation, which in the first instance would have been both simple and safe, so complicated and hazardous as not to be risked. The tumors, moreover, as they enlarge by their weight and size, become exposed to numerous accidents ; either they are excoriated by the movements of the legs, hurt by blows, or lacerated by being dragged along the ground. Anything that interferes with their integrity seems to change their character. From having been dormant they start into activity, and the slightest wound degenerates into a wide-spreading ulcer. When this last appearance is established, no treatment I know of can effect a cure. If there be a hope, it lies solely in the skilful use of the knife ; but generally the constitution is so much exhausted, and the disease so firmly established, that surgery is but a desperate resort.

When taken in time, the situation of the tumor being

ascertained, the skin is divided and the growth dissected out. This is easily done, and it is seldom that a vessel requiring ligature is divided. The care required is to spare the skin, no portion of which, unless it should be implicated, ought to be excised. Neither plaster nor suture will afterwards be wanted. The bitch would with her teeth remove either ; and as the healing process is established, the integument will contract and unite.

When there is more than a single tumor to take away, or one of large dimensions to remove, though there may be no important vessels to ligature, the oozing of blood is sometimes greater than may with safety be disregarded. - In such cases, the application of cold water, or of oil of turpentine, or the tincture of ergot of rye, or blowing upon the part by means of a pair of bellows, will be of service, and may each be tried ; but the actual cautery, though held in high esteem by veterinarians, is not suited to these instances.

After the tumor or tumors are cleanly removed, a course of iodine should be enforced ; and it should be persevered with for several months, nor given up simply because all present symptoms have disappeared. The tendency has been exhibited, and the medicine is now employed to prevent its development for the future ; and, by the continued use of the agent, we hope to accomplish that intention.

SKIN DISEASES.

EVERY affection of the skin in the dog is termed mange. This is very wrong ; and receipts for the cure of mange are all nonsense, unless we can imagine that one physic is good for various disorders. The dog is very subject to mange ; that is, the animal's system can hardly suffer without the derangement flying to and developing itself externally, or upon the skin. True mange is chiefly caught, being mainly dependent upon contagion ; but all the other varieties have the seats internally, and are chiefly owing to the keep or lodging. Too close a kennel will give rise to mange, as will too spare or too full a diet ; too much flesh or unwholesome food ; too hard or too luxurious a bed. In fact, there is hardly a circumstance to which the animal is exposed which will not cause this malady to be developed. Peculiar kinds of bedding, as barley straw, will give rise to it ; and particular kinds of diet, as subsisting entirely upon flesh food, will produce it. In short, I know a few, and only a few, of those things which will cause it ; and my time has been so taken up that I have been able to observe but five distinct varieties ; though my reason informs me there are many more than I here describe. However, as, in describing five kinds of mange, I do more than either of my predecessors, the public must be content with the moiety for the present ; and wait till either I find time to accurately note, if possible, the dif-

ferent forms which mange in the dog will assume, or some more close observer comes forth to take the task from before me.

True mange is dependent, as in the horse, upon an insect; and though not commonly met with, is known by the same symptoms, as the similar affection in the more valuable animal. The skin is partially denuded of hair, but never perfectly so; for in the most bare place, hairs, either single or in small and distinct patches, will be seen adhering to the surface of the body: these remaining hairs are very firmly planted in the skin, have a coarse or unnatural feel, and look all awry and unthrifty. The skin appears very dry and scaly; it is corrugated, or thrown into ridges. The parts chiefly affected have been the back, eyes, neck, &c.; though no part of the body is exempt, for I have seen it virulent upon the feet, and the rest of the body comparatively untouched.

The animal appears dejected, though at seasons he may assume his usual liveliness; but when nothing attracts his attention, his time is nearly consumed in scratching himself violently. His appetite generally remains good, notwithstanding the torture he endures; but the heat of the body denotes fever, and his thirst may be excessive.

The treatment consists in rubbing the body over with some of the various dressings for mange; some of which, however, are compounded for the horse, and do not very well suit the canine race. Care should be taken that the dressing, of whatever nature it may be, reaches and is

expended upon the skin, as simply anointing the dog or smearing the salve upon the hair is of no earthly use. The unguent which I have employed, and with such success as emboldens me to recommend it, is composed of—

Ung. resini . . .	As much as you please to take.
Sulph. sub. . . .	} A sufficiency to make the rosin ointment very thick.
Ol. junip. . . .	
	} Enough to make the unguent of a proper consistency, but not too thin.

This is to be applied one day ; washed off the next ; and then the dressing repeated until the dog has been dressed three times, and washed thrice ; after which the ointment may be discontinued ; but again had recourse to if the animal exhibits the slightest signs of uneasiness ; when the entire process may be gone through once more. Mercurial ointments are the most certain remedies for this disorder ; but then they are not safe, and should always be avoided where the dog is concerned.

The second kind of mange is where hair partially falls off ; and this kind of disorder is well marked by bare patches of small dimensions, showing themselves on the point of the elbow and any part which is prominent, and which the animal might be supposed to have rubbed as he lay in his kennel. The patches are small and free from hair ; but at the same time the skin exposed is rough, scaly, thickened, and corrugated. The itching is intense ; but it does not particularly affect the exposed

part; it rather seems to reside in those portions of the body which are well covered with hair.

For this form of disease the cure begins with tonic medicine; and after this has been administered a week or a fortnight, as the strength may appear to require restoration, it is suddenly left off; and liquor arsenicalis in gradually increasing doses is administered. If it be a little dog, let the first day's dose consist of half-a-drop each time; and if for a large animal, of two drops each dose; three doses in either case to be given in the course of the day. In the former case, the quantity of arsenicalis is to be increased half-a-drop each day, and in the latter instance one drop daily is to be the advance; the quantity in both cases to be distributed over three doses, one to be given in the morning, one at noon, and the last at night.

The medicine is to be kept on increasing each day, until the dog loathes his food; has a running from the eyes; a scarlet conjunctiva; or exhibits some symptom that denotes the physic has hold of his system; when the arsenicalis is to be discontinued for three days, and then steadily persevered with at the dose which preceded the derangement. Thus, supposing it requires three and a half drops to throw the small dog off his appetite, the quantity to resume with will in that case be three drops.

There is no power I possess which can predicate the quantity of the liquor arsenicalis which an animal will bear; its effects on different creatures of the same species are so various, that what one can gorge with impunity

would kill his companion. On this account no fixed quantity of the medicine can be recommended; but the practitioner must be satisfied to watch the symptoms induced, and be content to be guided by these. So soon as the physiological symptom is beheld, the good results of the medicine may be anticipated; and no compound in the pharmacopœia works with greater certainty. The disease will begin to decline; and in a month, six weeks, or two months at furthest, will be thoroughly eradicated. In the course of that period, however, it may be as well to give Nature a jolt every now and then, by occasionally increasing the dose, being always prepared to diminish it on the symptoms giving the slightest hint that it is prudent so to do. The arsenicalis should be used simply diluted with water; and during the period occupied by the cure, no other medicine whatever will be required.

The next form of mange attacks very fat and cruelly overfed animals. The poor dog is very foul. He, as it were, smells aloud; and his hide is enormously thickened, being everywhere devoid of sensation. Pinch it as hard as you can—even until the moisture be forced through the pores by the pressure—and the operation which should inflict pain, will only communicate pleasure.

The animal, instead of crying out or endeavoring to snap, will stand altogether quiet, the expression of the face announcing the perfect delight it experiences; or the head turns round to lick the hand of the pincher, thereby entreating him to continue the delicate recreation.

The hair is generally more or less removed from the

back; and the thickest portions of the skin are either above the neck, or just before the tail. The animal is the whole day dull, never being alive except at meal-times, when it is all activity; the rest of the day is passed in sleeping, licking, scratching, biting, and gnawing its person—to the infinite annoyance of an indulgent master, who looks on the mass of disease before him, and with regret pictures the animated creature which it once was.

Here the mode of feeding must be changed. Flesh must be strictly prohibited. Boiled rice forms the most wholesome diet; but even rice milk will not be touched. Neither will be eaten at first; but this does not much signify, as a day or two of abstinence rather does good than injury. If, however, the refusal to feed be exhibited beyond the third day, one, two, or three ounces of meat, according to the size, may be allowed; which quantity, though insufficient to satisfy the desires, is sufficient to keep a dog alive and hungry for an almost indefinite period. Fresh vegetable diet should be presented every day; and if declined, it should immediately be withdrawn. On no account should it be allowed to remain about, and the animal to blow upon it till it either becomes stale or noisome in the creature's eyes. Fresh clean rice should be boiled, and presented every morning; and this should be offered and withdrawn, as though it were too choice a luxury to be twice refused. The animal, tired out, and despairing of gaining anything better to eat through resistance, will fall to the loathed

dish at last ; and afterward swallow it without any coaxing, although the preference for flesh as food will be cherished to the death.

The food being managed as directed, the dog may also have first a mild emetic, to be followed by three doses, on three different days, of castor-oil prepared as recommended, p. 116.

To these is to succeed a course of pretty strong tonics, to keep up the general tone of the body, invigorate the appetite, and to support the strength. Likewise a cold bath every morning may be added, and plenty of exercise in the course of the day.

So soon as the appetite is subdued, stimulating dressings are applied down the back, where the hair is wanting ; and, for a beginning, the common mange liniment answers very well. It is thus prepared :—

Ol. tereb.	} Of each equal parts. Mix.
Ol. picis	
Ol. nucis	

This may at first attract no notice ; after it has been submitted to for a week, add to every three pints an extra pint of turpentine, which will soon banish all the philosophy the strongest-minded dog may have at his command. Even subsequent to the period when the application of the liniment is received with the acutest and most piteous cries, the torture must be continued until the skin, being reduced to its natural thickness, announces that its office is perfected ; only, with the pro-

duction of this last effect, the agent that gives such pain should be used less lavishly.

During the application of the liniment, some diluted liquor arsenicalis may also be administered, and even the pills containing iodide of sulphur exhibited.

The fourth kind of mange is where the hair falls suddenly off in circular patches. For this any simple ointment, as the ung. cest. or no application at all is sufficient.

The fifth kind is the worst, especially where it attacks young pups. Almost all the hair falls off; and the poor little creature is thin, and nearly naked, while the surface of the body is covered with dark patches, and comparatively large pustules. If the dark patches be punctured, a quantity of venous and grumous blood exudes; but the wound soon heals. In full-grown dogs, the same form of disease seldom involves more than the top of the head, neck, and the entire length of the back; but it is precisely of the self-same character as in the more juvenile animal.

In both cases the treatment is the same. The dark pustules are to be cut into, which produces no pain; and the pustules are to be freely opened, which operation is attended with no apparent effects. The bare skin is to be then washed tenderly with warm water and a soft sponge, after which the body may be lightly smeared over with the ointment of camphor and mercury; see p. 265. This operation must be repeated daily. The liquor arsenicalis may be administered as drops, and pills of the iodide of sulphur likewise exhibited.

Where the dog is old, a cure invariably results ; but it takes time to bring it about. Perhaps months may be thus consumed ; and the practitioner will require a goodly stock of patience before he undertake the treatment of such a case. The proprietor, therefore, must be endowed with some esteem for the animal, before he can be induced to pay for all the physic it will consume. I cannot account for so virulent a form of skin disease affecting pups ; but certain it is, that they have scarcely left the dam before its signs are to be detected. Probably it may be owing to their being weaned upon garbage or putrid flesh. Certain it is that the cure of creatures at this tender age greatly depends upon their previous keep. If it has for any known length of time been good and generous, the practitioner may undertake the case without fear ; but if, on the other hand, the pup, though of a valuable breed, had lived in filth, never enjoyed exercise, and been badly nurtured, no entreaties should tempt the veterinarian to promise a restoration. It will certainly perish, not perhaps of the skin disease, but of debility.

Here I may for the present conclude my imperfect account of mange ; again insisting that in every form of the disorder the food is to consist of vegetables, and every kind of flesh is to be scrupulously withheld, unless to pups in a very weakly condition. Blaine and Youatt speak of alteratives as necessary towards the perfection of a cure ; but as I am simply here recording my experience, all I can say is, I have not found them to be re-

quired. Cleanliness—the bed being repeatedly changed—free exercise—wholesome, not stimulating food—and fresh water—are essential towards recovery. In no case should the dog suffering under these complaints be allowed to gorge or cram itself; but the victuals must be withdrawn the instant it has swallowed sufficient to support nature.

CANKER WITHIN AND WITHOUT THE EAR.

BLAINE treats of these two as different diseases. Youatt speaks of them as the same disease situated on different parts. As they differ in their origin and in their effects, however closely they may be united, I hold Blaine's arrangement to be the soundest, and therefore to that I shall adhere. Water-dogs are said to be the most liable to attacks of these disorders; but I have not found such to be the case. At the mouth of the river Ex, near Exeter, Devonshire, for instance, there are numerous dogs kept for the purpose of recovering the wild fowl, by shooting of which their masters exist during winter. Here is rather a wide field for observation; but among the many water-dogs there to be found, the canker both internal and external is unknown; whereas there is scarcely a dog kept in town, especially of the larger size, that does not present a well-marked case of canker. The London dog is, for the most part, over-fed on stimulating diet (flesh), and kept chained up, generally in a filthy state. The country dog gets plenty of exercise, being allowed

to sleep in the open air where he pleases outside of his master's cottage, and has but little food, and very seldom any flesh. I scarcely ever have a sporting dog sent to me, on the approach of autumn, suffering from what their masters are pleased to term "foul," but canker within and without the ear are found to be included in the so-called disorder. Often am I desired to look at both long-haired and short-haired dogs, and find both kinds victims to these diseases ; but canker without the ear, or on the flap of the ear, I never see without canker within the ear being also present. Canker on the flap of the ear, it is true, becomes the worst in short-haired dogs, because these animals have this part by nature more exposed to injury. Long-haired dogs, on the other hand, have the disease within the organ worst, because the warmth of their coats serves to keep hot and to encourage the disorder.

Therefore, we find on inquiry that neither breed of dogs is more liable or more subject to be attacked by a particular kind of canker ; though in each kind there exist circumstances calculated to give a direction to the disease when once established. Authors speak of rounding the ear for external canker ; that is, of taking a portion of the border away, so as to leave the flap of the ear the less for the operation ; and fox-hounds are said to have the ears rounded to escape the ravages of the disorder. There are said to have been poor dogs subjected to a second and third rounding ; till at length the entire ear has been rounded away, and the wretched beast h-

been at last destroyed; because man first fed it till it was diseased, and then was too heartless properly to study the nature of the affection which tormented the animal.

Let those who may feel disposed to question this view of external canker, ask themselves what it is which induces the dog to shake his head violently at first? For the brute must shake the head violently and frequently, before canker in the flap can be established. The disease is, in the first instance, thus mechanically induced. It has its origin in the violent action of the beast; and that action is the very one which ensues upon the animal being attacked by internal canker.

The dog shakes his head long before the eye can detect anything within the ear. By that action, in nine cases out of ten, we are led to inspect the part. The action is symptomatic of the disorder, and it is the earliest sign displayed. In the dog whose coat does not favor internal canker, it may, however, establish the external form of the disease; which being once set up, may afterwards even act as a derivative to the original disorder.

External canker is nothing more in the first stage than a sore established around the edge of the ear, in consequence of the dog violently shaking the head, and thereby hitting the flap of the ear with force against the collar, chain, neck, &c. Shaking, however, does not cure the annoyance. An itching within the ear still remains; which the dog, doubtless imagining it to be caused by

some foreign body, endeavors to shake out. In consequence of the continued action, the sore is beaten more and more, till an ulcer is established ; the ulcer extends, involves the cartilage which gives substance to the flap of the ear, and thus is created a new source of increased itching. The ulcer enlarges, becomes offensive ; and he who is consulted, instead of seeking for the cause, begins by attending to the effect. Various remedies are employed to cure the flap of the ear ; and each and all of these failing, the poor animal is at length rounded, and as books and teachers advise, rounded high enough up.

All the diseased parts are carefully cut away ; but the disease appears again, and the wretched beast is rounded a second time. On this occasion the rounding is carried still deeper, the operator being resolved the knife this time shall take effect. The dog has little ear left when the disease appears again ; and the master saying he wants his dog for the field—to shoot over, and not to look at—the remaining portion of the ear is removed, hoping for better luck this time. However, chances are now against them ; they have cut beyond mere skin and cartilage, into the seat of flesh in goodly substance. Spite of the brutal use of the red-hot iron, the hemorrhage is great, and ulcers appear before the cicatrix is perfected. The miserable animal having nothing more that can be cut away, is then killed, being said to be incurably affected.

This is a true history, and can be substantiated by reference to all the authors who have hitherto written

about the dog. It does not, therefore, depend solely upon the testimony of the present writer ; but sad is the reflection, that all the pain and suffering thus occasioned was unnecessary. Canker without the ear cannot be established unless canker within the ear, in the first instance, exists. It may not be violent ; it may be present only in an incipient stage, and never get beyond it ; but in this state it is sufficient to annoy the animal, and make it shake its head. Doing this, however, it does enough to mislead the practitioner, and cause the death of the unfortunate animal.

When a dog is brought with canker in the flap, the first thing I order is a calico cap, to keep the animal from shaking the ear. I then give the person accompanying the creature a box of the mercurial and camphor ointment, ordering it to be well applied to the external ear thrice daily, with the intention of cooling



DOG WITH A CANKER CAP ON.

the part. I do nothing absolutely to heal the ulcers beyond keeping the part from being shaken ; for I have not yet met with a case in which the cartilage has been

positively involved, however much authors may write about such a texture having suffered. I direct my chief attention to the healing of the internal ear, from which I trace all the evil to have sprung. For this purpose I give a bottle of the canker-wash, described a little further on, ordering it to be applied thrice daily, and rest contented as to the result.

With regard to internal canker, how virulent was the disorder, and to what lengths it used to progress, may be imagined from reading Blaine and Youatt; both of whom speak with terror of its effects, advising the use of agents for the recommendation of which I cannot account, excepting by the supposition that they were selected under the influence of fear. Most of the solutions advised are painful; but how far they were effective we may conjecture from the descriptions they have left us of the disease. They tell us that, as the disorder proceeds, it eats into the brain; either causing the dog to be destroyed, or driving it phrenetic. The poor animal, we are informed, leans the head upon the fore-feet, the diseased ear being pressed downwards, and continually utters a low moan, which at length rises into one prolonged howl. Of all this I know nothing; but I remember at college, when going the rounds with the Professor Simonds, on a Sunday morning, hearing one of those huge howls which are uttered by large dogs when enduring excessive torture. On my asking whence the sound proceeded, I was coolly informed by my teacher that he supposed Sam (the head groom) had been pouring

some dressing into the ear of a dog that had got canker. Of what the dressing that had occasioned such pain was composed, I never inquired; but we may judge of its power to destroy the bone, from the extent of the agony which it produced. No wonder, when such powerful agents were employed, the bone, the brain, or any other part, was affected.

Thank heaven! there is one good custom prevalent in this disease—dogs affected with it are brought to us early. Often, when the animal is only observed to be constantly shaking and scratching the ear, the proprietors bring the dog for us, to remove something from the interior of the organ. At other times, and with the most careless or unobservant masters, the dog is brought under our notice with a blackened discharge within the convolutions of the ear, and a slight smell, like decayed cheese, proceeding from it. A crackling sensation is then imparted to the fingers when the base of the ear below the flap is manipulated; the necessary pressure sometimes drawing forth an expression of pain. A worse case than this I have not encountered; though how common canker has been in my practice may be conjectured from my keeping a two-gallon stock-bottle of the wash in my surgery, and a label, for the bottles in which it is sent out, within my drawers. The mode of administering this wash is admirably described by Youatt, from whose pages I transcribe it:—

“Some attention should be paid to the method of

applying these lotions. Two persons will be required in order to accomplish the operation. The surgeon must hold the muzzle of the dog with one hand, and have the root of the ear in the hollow of the other, and between the first finger and the thumb. The assistant must then pour the liquid into the ear; half a tea-spoonful will usually be sufficient. The surgeon, without quitting the dog, will then close the ear, and mould it gently until the liquid has insinuated itself as deeply as possible into the passages of the ear."

The warming of the fluid I find to be unnecessary; and there is something to be added to the above direction, when the wash I advise is employed. After one ear is done, let it be covered closely with the flap, and the other side of the head turned upward without releasing the dog. When both are finished, take a firm hold of the dog, and fling him away to any distance the strength you possess is capable of sending the animal; for the instant the dog is loose, it will begin shaking its head, and, as the canker-wash I employ contains lead, wherever a drop falls, a white mark or spot, as the liquid dries, will be left behind.

CANKER WASH.

Liquor plumbi	} Of both equal parts.
Aqua distil	

Youatt speaks of the liquor plumbi as a dangerous agent to the dog, and advises for canker that a scruple be mixed with an ounce of water; but in opposition to that esteemed author's recommendation, I have employed the

liquor plumbi pure, with the best effect, in extreme cases; though, in ordinary disease, the above is sufficiently strong; and in medicine it is a maxim that a sufficiency is enough.

I give to the animal, as a general rule, no medicine to take; but invariably recommend the dog to be kept on vegetable diet; for, inasmuch as meat is the sole cause of the disorder, however potent may be the drugs employed for the cure, it is imperative for its eradication that the cause be removed.

Sometimes, in consequence of the violent shaking of the head, serous abscesses of considerable size form inside the flaps of the ears. This mostly happens with large dogs, and the abscesses are hot and soft, being excessively tender. The animal does not like them to be touched, or even looked at, but is frequently shaking the head, and howling or whining afterwards.

The remedy in these cases is equally simple and efficient. The person who undertakes to remedy the evil, first, by way of precaution, tapes the animal; that is, he forms a temporary muzzle, by binding a piece of tape thrice firmly round the creature's mouth. He then places the dog between his knees, and turning up the ear, with a small lancet makes quickly an opening in what then is the superior part of the sac in the inverted ear. This is necessary, because, if the opening were made inferiorly, all the fluid would escape, and the side of the emptied sac would collapse. If the point of the knife even could be introduced into an incision made upon the lower part

of the ear, it would not be so easy to cut speedily from below upward, as to push the blade from above downwards. Well, the opening being made with the lancet, a little fluid escapes ; but no pressure being put on the sac, the major portion is retained. The operator then takes a straight probe-pointed bistoury, and having introduced it into the orifice, by making only pressure, instantly divides the sac. Frequently considerable fluid escapes ; the beast operated upon makes up its mind for a good howl ; but, finding the affair over before its mouth was moulded



A DOG TAPED OR MUZZLED FOR OPERATION.

to emit the sound, the cry is cut short, and the dog returns to have the tape removed, that it may lick the hand that pained it.

After the enlargement is slit up, nothing more is required than to fill the sac for a day or two with lint soaked in the healing fluid ; and when suppuration is established the lint may be withdrawn, and the wound, if kept clean, left to nature.

THE EYE.

MOST writers describe a regular series of disorders associated with the eye of the dog. I must be permitted to recite only those which I have witnessed; and surely, if the diseases which the writers alluded to above have mentioned do exist, I must have encountered some solitary instance of each of them; instead of which, I have been honored by the confidence of all classes, and have after all to confess I have not witnessed a specimen of genuine ophthalmia in this animal.

CATARACT.—This derangement of the visual organ is very common with the dog. Every old animal that has lost his eyesight is nearly certain to be blind from cataract. The optic nerve appears to have retained its health long after the crystalline lens has parted with its transparency. The latter becomes opaque, while circumstances allow us to infer the former is yet in vigor; for certainly dogs do see through lenses, the milky or chalky aspect of which would justify us in pronouncing the sight quite gone. There is no precise time when cataract makes its appearance. It may come on at any period or at any age. It may be rapid or slow in its formation; but from its generally known habit, we should be inclined to say it was rather slow than otherwise; though upon this point the author can speak with no certainty. No breed appears to be specially liable to it, but all seem to be exposed to it alike. The small-bred,

house-kept, high-fed dogs, however, are those most subject to be attacked by it; for, in these kinds of animals, on account of the derangement of the digestive organs, the eyes seem to be disposed to show cataract earlier than in the more robust creatures of the same breed.

The cause of this affection is, in the horse, usually put down to blows; but, in the dog, we dare not say the disorder is thus produced. The dog is more exposed to the kicks and cuffs of domestics than is the horse; the violence done upon the first-named animal being less thought about, and therefore less likely to be observed. But that the disease takes its origin in any such inhumanity the author has no proof, and no intention of insinuating an accusation against a class, who being generally ignorant, have therefore the less chance of a reply.

The disease seems to be the natural termination of the animal's eyesight; and, though the author has seen the iris ragged-looking, as though acute ophthalmia had loosed its ravages upon the delicate structures of the eye, nevertheless he has in vain endeavored to detect the presence of that disease.

Were ophthalmia common enough to have produced one-half of the cataracts which are to be witnessed by him who administers to the affections of the canine species, surely I must have met with it; as not being a very brief disorder, but one which by its symptoms is sure to make itself known, I must have encountered it in one of its numerous stages. However, not having seen it, and still being anxious of tracing cataract to its

source, the author has been induced to attribute it to the influences of old age, high breeding, or too stimulating a diet.

Medicine having appeared to do injury rather than to produce benefit, the author has generally abandoned it in these cases ; whereas those measures which are within the reach of every proprietor, such as change of abode, attention to necessary cleanliness without caudling in the bed, wholesome food, and a total abstinence from flesh, added to the daily use of the cold bath with a long run, and constant employment of a penetrative hair-brush to the skin afterwards, have seemed to stay the ravages of the disorder ; and on these, therefore, the author is inclined to place his entire dependence.

GUTTA SERENA.—The author has seen one or two cases of this affection. One was present with disease of the brain, to the increase of which it was clearly traceable. The other was attributable to no known cause ; but as blows on the head are beyond all doubt ascertained to produce this affliction, the author in his own mind has no doubt of its origin. A temporary affection of this nature is also constantly witnessed when the dog falls down in a fit, or rather faints from weakness ; as when a female is rearing an undue number of pups, or when a dog has been too largely bled, or retained too long in the warm bath.

In the last cases, the gutta serena departs as the animal recovers ; but in the first-named, sometimes it is constant, and no medicine appears to affect it for good or for evil. The author, therefore, does nothing in such

cases beyond giving general directions, as in the instance of cataract.

Gutta serena is known by the organ being perfectly clear, but the iris remaining permanently fixed. The introduction of sudden light produces no effect on it; neither, unless the current of air be agitated, does the eyelid move. Towards the latter stage the eye changes color; but when it first occurs, a person without experience would prefer the eye in this state, because it looks so thoroughly bright and transparent. The aspect of these eyes is known to those who are much among animals, and the carriage of the body is recognised as altered when a creature becomes blind; besides which, trust him alone, and his running against different obstacles, as well as his manner of walking, will declare the truth.

SIMPLE OPHTHALMIA.—To this disorder of the eye the dog is very susceptible. It may be caused by dust, dirt, thorns, or portions of leaves getting into the eyes; the symptoms are, constant closing of the lid, and perpetual flowing of the tears. Though the eye be closed, the lid is never quiet; but is being, during the entire period, spasmodically, though partially, raised to be shut again, or in perpetual movement. If the lids are forced asunder, the conjunctiva or mucous membrane forming the inner lining of the lid is seen to be inflamed; while the same membrane covering the ball of the eye is perceived to be of a white color, and perfectly opaque.

The cure in this instance is always, first, to remove

the cause of the injury, and then to apply some of the remedies in the manner mentioned hereafter.

The conjunctiva in the dog is very sympathetic with the mucous membrane lining the stomach. The interior of the stomach may be inflamed, and the eye sometimes exhibits no sign of sympathy; but more often, as in distemper or rabies, it will denote the existence of some serious disorder. So if the animal's digestive powers are weakened by an undue quantity of purgative medicine, the eyes will assume all the symptoms of distemper, even to the circular ulcer in the centre of the organ. However, in instances of this kind nothing need be done for cure; the major disorder being subdued, the minor one subsides.

No matter how virulent the disease of the eye may appear to be—even though it should become perfectly opaque—let it alone: any meddling does injury. No bathing or medicaments can hasten the cure. Although it should ulcerate in the centre, and the terrible appearance of the eye be seconded by the entreaties of the proprietor, still I caution you to continue quite passive. Touch the ulcer with nitrate of silver, as is the common practice, and the eye will most likely burst. The aqueous humor will escape, and a large bunch of fungus will start up in the place of the ulcer occupied. This fungus, if let alone, may fade away as the stomach returns to health; but a white spot is established in its place to remind you of your officiousness.

Nevertheless, simple ophthalmia occasionally will ap-

pear when nothing can be detected to affect the stomach; probably owing to large dogs chasing through brush-wood, or those of the smaller breeds hunting through long grass. Then a square of soft lint, formed by doubling a large piece several times, is laid upon the painful organ, and kept wet with the following lotion:—

(1.) LOTION FOR THE EYE.

Tinct. arnic. mont.	Three drops.
Tinct. opii	Six drops.
Mist. camph.	One ounce.

The first symptoms having subsided—that is, the dog being capable of raising the lid, and the flow of tears having in some measure stopped—the previous lotion may be changed for the following wash:—

(2.) EYE WASH.

Arg. nit.	One grain.
Mist. camph., or Aq. dist.	One ounce.

The proper manner of applying these preparations to the eye deserves notice. Let the owner buy a large-sized, long-haired, camel's-hair painting brush; pour a little of the liquid into a saucer; saturate the brush in the fluid; pull the lids gently asunder, being careful not to call forth resistance by frightening a timid animal with any exhibition of haste or violence; then, having the eye exposed, draw the brush quickly across it, and the business is over.

The author is frequently consulted by ladies, because their favorites' eyes run water. Such is a consequence of high breeding in some of the canine species; and being so, medicines of various kinds, by drying up the secretion of the lachrymal gland, may at first appear to do good, but must ultimately be fruitful of the most serious injury.

EJECTION OF THE EYE.—The eye of the dog is rather curiously situated, which, as the writer knows of no author who has remarked on its position, he may as well refer to in this place. The eye of man is situated within a bony orbit, from which it cannot in the course of nature protrude. The eye of the dog, also, has an orbit partly formed of bone; but as regards the ridge, which in man supports and gives prominence to the eyebrow, in the dog it is composed of ligament, as with animals of the cat, pig, and other species. The reason of this arrangement—the cause for composing part of the orbit of ligament—is to allow the eye to protrude or to take its place without and before the orbit. This position of the eye is easily perceived, when a live specimen which has confidence in man is examined upon the knee, and at the same time the skull is inspected. The cause of this peculiar situation of so important an organ, is to allow the eye to possess telescopic properties; because the dog has the faculty of withdrawing the eye within, or rather quite to the back of the orbit; as any who have beheld the animal in some stages of brain disease, or the last stage of distemper, must, with their attention directed to

the fact, be convinced. The dog in its wild state lives by the chase, and therefore has Providence endowed his visual organ with peculiarities which best enable it to discover its prey ; at the same time, also, affording extra scope of vision, or power of seeing around it, to the eye of the animal.

Owing to this peculiarity, the eye in consequence of a bite may be forced out upon the cheek ; or, as once happened in my own experience, the use of tapes for the purpose of giving medicine may be the cause of the injury. Whenever this happens, procure a glass of clean milk-warm water, and a piece of soft lint ; then wash the eye ; when obtain a soft napkin ; let the eye be well greased with any mild and perfectly sweet ointment ; wrap the napkin about the right hand, and with the fingers thus encased, gently take hold of the ejected ball of the eye, while the fingers of the left hand are employed in raising the lid of the emptied orbit ; then applying gentle but adequate force, and at the same time giving to the wrist of the right hand a rotatory motion, the eye will at once assume its proper place. The use of the eye lotion and wash will perform all that the after symptoms may require.

Dogs are often brought to us because the animal has been taking liberties with the cat ; which mistress puss has turned to resent, and her paw—the claws in the moment of irritation being out—has unfortunately scratched the dog's eye. When consulted on such a subject, the eye lotion No. 1 is in most instances all that is required ; for

the coverings of the eye are endowed with great powers of self-reparation. If, however, the application recommended does not perform everything to the proprietor's satisfaction, the eye wash No. 2 will perfect the cure. Accidents of this description are apt to leave scars in the shape of white marks across the eye, which time must be allowed to remove; and this in general is performed, while all the appliances of art in the writer's hand have been useless for hastening this object.

DISEASES OF THE LIMBS.

THE DEW-CLAWS.—The dew-claws, as they are termed, grow high upon the inner side of the leg, nearer to the foot than to the elbow. They are frequently removed while the dog is very young, being then merely cut off with a pair of scissors. This, however, is a very primitive way of operating; and it is best done with a knife, first reflecting back sufficient skin to cover the wound which the removal will occasion. The excision, moreover, is only justifiable when the dew-claw hangs from the leg attached to it merely by integument; when it is regularly formed, united to the leg by means of continuous bone, it may be allowed to remain; for in that case there is little more danger of its being torn off as the dog grows up and hunts game, than any other of the claws appended to the extremity of the foot.

THE CLAWS.—These frequently, especially in petted dogs that pass their days parading about on Turkey carpets, become of extraordinary length; in some cases,

turning round and forming a complete circle, so as to penetrate the little pad at the base of the last joint of the toe. In this case they cause swelling, inflammation, and suppuration, accompanied by such intense pain, that in extreme cases it may be necessary to take away the toe of the foot itself, although in general it is sufficient to clip the offending claw. However, to do this nicely, with expedition, and without giving great pain to the patient, is to be desired. Blaine recommends a small saw, such as is employed to cut off cock's spurs with; but the dog must have excessive patience and extraordinary powers of endurance, who could allow this to be moved quickly backwards and forwards on a claw, one end of which rests on an inflamed and highly sensitive surface. Besides, it is not one claw we are generally required to remove, but sixteen; and long before the first had been fairly taken off by the method advised by Blaine, the cries of the poor animal would say, "Hold, enough!" Moreover, favorites of the class I have mentioned are generally brought by their mistresses, who cannot endure their pets to suffer, and rightly refuse to leave them to the mercy of a veterinary surgeon. This last circumstance requires a speedier instrument than the one proposed by Blaine, to be discovered. The rowelling bistoury, employed for the horses, answers better than the saw; but even it occasions so much pain as to cause serious annoyance and obstruction. I have found nothing answer so well as a pair of wire nippers; which, provided they be in good condition, will take off the whole

of a dog's claws, although for the operation the animal never quits its mistress's arms. They are quick and effective, cutting through the strongest claw on the instant ; giving no pain ; often removing the nail without the knowledge of the patient, who provokes laughter rather than commiseration by frequently shamming the agony he does not feel—venting heart-rending cries, but invariably in the wrong place. For the performance of the operation there is but one caution necessary, and that is, to leave the root of the claw long enough, or not to attempt cutting it too short ; because the unnatural life the animal lives causes small arteries to extend even into the growth of horn, and a little blood is a terrible loss in a lady's eyes. However, beyond causing the mistress distress, the practitioner need be in no fear about dividing one of these abnormal vessels, for the eccentric growth of which the most experienced practitioner cannot at all times be prepared.

FALLING OFF OF THE CLAW.—There is another injury to which the claws of the dog are exposed, and the cause of which in no instance have I been able to trace. The toe becomes hot, swollen, and inflamed ; the animal walks lame, or upon three legs. Whenever the particular claw in fault is touched, the cries of the dog sufficiently testify that the seat of the disease has been found. A simple treatment, such as bathing the claw and placing the foot frequently in warm water, will occasion the horny covering to be cast off in a few days ; after which all that is required will be to wrap the part up in soft lint for a

short period, and to deprive the animal of its accustomed exercise for a day or two.

SINUSES UP THE CLAW.—These are of frequent existence, and are commonly found where their presence was not suspected. The dog walks lame, and its master's sagacity cannot discover the cause. The animal is accordingly submitted to our inspection. To pinch the claw in this case is of no use; it can only mislead the judgment. The better plan, after having ascertained none of the claws are loose, is to make the dog stand upon the lame foot on a piece of blotting paper. If the slightest moisture be left thereon, throw the animal on his back, and minutely examine the lower surface of each claw. On one will be seen a small hole, not larger than the point of a pin, from which exudes a thin watery discharge.

Soak the foot in warm water; then with a sharp knife pare off the superficial horn; then soak and pare again; and so on till the entire claw is removed; when slit up, making a free wound of any sinuous opening that may exist in the ball of the toe. Dress the interior of the sinus with a small portion of sulphate of copper; afterwards with the healing lotion previously recommended; and all will do well: but the claw once taken away, either by nature or art, is very seldom perfectly restored.

FOOT-SORE.—Men of robust habit, who shoot over an immense tract of country, and take a pleasure in lawfully finding the game they kill, often have to complain

that their dogs become foot-sore. These animals have an elastic pad at the bottom of each foot, on which, conjointly with the nails of the toes, the creatures walk. The bottom of the dog's foot is covered with a thick cuticle, which is rapidly reproduced in ordinary cases, as soon as or before it has been worn down : but the game dog is often kept inactive during the summer, and then in autumn brought into sudden work. The consequences of this foolish practice are, that nature during the warm season supplies only a cuticle fitted to the wants of the animal, which being suddenly forced to endure excessive exercise, soon wears away, and the foot thus left devoid of covering, is raw, and consequently tender. For this state of the part, Blaine, who is therein followed by Youatt, recommends "pot liquor." I do not know what "pot liquor" means. Cooks apply the name to various refuse waters, in which different and opposite ingredients have been boiled. If so, the material with which it is made being dissimilar, the product cannot be the same. It appears to be a filth, generally cast into the hog-tub ; and as such cannot be a proper medicine wherewith to cure a lame dog's foot. I throw it into the receptacle for which it is intended ; and do so because I cannot understand it is possessed of any curative properties. The mode I pursue in these cases is simply this :—I get a basin of tepid water and a soft sponge ; and I then well wash the injured foot. When every particle of grit or dirt is thoroughly removed, I apply to the dried sore surface a lotion composed of two grains of chloride of zinc to one

ounce of water, with one or two drops of the essence of lemons. Having thoroughly washed the foot with the lotion, I soak some rags in it, which I wrap around the injured member, fixing over all a leather or gutta-percha boot; and when thus treated, and the animal is subsequently brought into work with caution, a few days I find generally settles the business.

DOG-CARTS.—This appears to be the place to meet, or rather answer, the remarks which have appeared in Youatt's work on this subject. He argues, because the dog is a beast of draught in northern climes, it can be without violence, and indeed was intended by Providence to be used as such in temperate countries. Thus, if this argument be of any value, that which the dog can endure in a temperate climate, it can likewise without injury undergo in a torrid zone. The argument, if of worth, admits of this extension; for, if the subject of it is to be moved at all, it is not for the reasoner to arrogate the power of saying at what point it shall stop. However, granting him to possess this right, he will thereby gain nothing by it. In the northern climes, where the dog is employed as a beast of draught, it is so used only for the winter season; during which time the face of the landscape is covered by one sheet of snow. Is the poor dog in a cart, as seen in this country, only so employed? Is he not rather obliged to drag his heavy load, to which the master's weight is often appended, along dusty roads instead of snowy paths, and at the top of his speed, rather than at a pace which the poor creature can main-

tain for hours ? Is it not worked in summer as well as winter ? Does not mud cover the roadways in this country during the colder season for a far longer period than the snow ? The summer's toil must be most oppressive to this over-tasked animal ; for, though the dog is naturalized close to the northern pole, he becomes scarce for a long distance before the equator is reached. It is the creature of a cold climate ; and what it can do in one country is by no means the measurement of that which it can perform in another ; as those who have been at the trouble and expense of exporting hunting-dogs from England to India can testify.

The foot, moreover, may travel over a sheet of snow with impunity, which may be unsuited for journeying over artificial roads, deep in mud or water ; or else hot, dry, and parched with a summer's sun. The sportsman's dog is often sore-footed ; and do the approvers of dog-carts pretend that the wretched beast, forced by an inhuman master to undue labor, is of a different species ? If the animals are the same, how can it be argued that the organ, which when moving over soft ploughed or grassy fields often fails, is all-sufficient for the longest and heaviest journey performed upon a hard artificially constructed road ?

One grave senator in the House of Lords used as an argument against the Bill introduced to put down that abominable nuisance, dog-carts, in this country, the pleasure he had experienced, when a child, while being drawn in a carriage pulled by a dog along the lawn

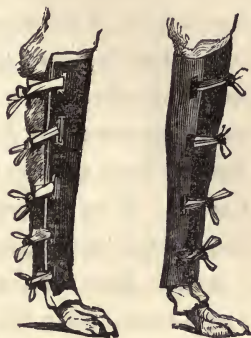
attached to his father's residence. There is no legislation required to meet such cases. No doubt the pleasure felt by the delighted child was shared by the beast, who wagged his tail, and scarcely felt the tax imposed upon its huge strength. Had the cart been removed from the lawn to the road, and been knocked up with rough wheels and without springs, like the carts used by vagrant poor are, the load of a child would not even then have made the cases similar. To make the instances the same, the cart must not only be of the rudest construction, but it must be filled with weight limited solely by the master's capacity to buy ; while on the top of the burthen must be placed, not a happy child, but an idle full grown rascal. And the vehicle thus encumbered must be dragged, not along a soft lawn, at a pace necessary to please the son and heir, but along a hard road, at a rate which alone can satisfy an impatient and brutal master.

In whichever way we regard this question, reason proves against it, and the dog subject to the most dreadful disease that is communicable to man should on no account, in this densely populated country, be subjected to usage best calculated to bring on the malady.

FRACTURES.

A FRACTURE is technically called a solution of continuity ; but, as the general reader will imagine the definition can hardly be correct, with regard to a bone which may be broader than it is long, I will here define

it to be the violent division of a bone into two or more parts.



Fractures are divided into comminuted, simple, and compound. The comminuted and compound, for the present purpose, may be regarded as one and the same; since it is obviously impossible to restore the bone of a dog which has been crushed into innumerable pieces; and such a state of the hard structure is scarcely possible to exist without the soft parts, as flesh or muscle, around the injury being involved, or the lesion rendered compound as well as comminuted in its nature.

Then it is simple fractures only that have to be dealt with in this place; and a simple fracture exists when a bone is snapped across into two equal or unequal pieces. It does not matter at what point the injury may occur; so that the bone be broken only into two pieces, and none of the flesh be torn, or the joint involved, the fracture is a simple one. In the dog, several simultaneous simple

fractures may exist; as where the animal breaks across the whole of the four metatarsal bones proceeding from the hock to the foot; or snaps, which is of more rare occurrence, the entire number of metacarpal bones, proceeding from the joint, which is called the knee of the dog, towards the foot of the animal.

The bones, however, most commonly fractured are the ulna and radius in the fore-limb, and the tibia and fibula in the posterior extremity. Next to these in order are the femur or thigh-bone, in the hind-leg, and the humerus or arm-bone of the anterior limb. Then come the four metacarpal or metatarsal bones, being the same in number in both legs. These are all the author undertakes to treat. The first and last he manages pretty successfully. For the restoration of a fracture, all that is necessary is to bring the ends which have been divided together, and to keep them in the place into which your art has brought them. To accomplish this end, the author is accustomed to cut from a sheet of stout gutta percha three broad straight ribbons; then to soak these in warm water till they are pliable, having first cut in them several holes resembling button-holes, by the aid of a punch and narrow chisel. When they have lain in the warm water a sufficient time to soften, and no more—for the water of too great a heat shrivels up as well as softens the gutta percha—he draws forth one ribbon, and this he moulds to the front of the sound leg.

That done, he takes another piece of the gutta percha, and this he models to the hind part of the sound leg.

The remaining slip is fixed to the side of the limb. After the pliable gutta percha has been forced to assume the shape desired, it is the practice of the writer to cover it with a cloth saturated in cold spring water, to hasten the setting of the material, and thereby shorten a process which always renders the dog somewhat uneasy. All this accomplished, he next braces the splints together, and fixes them upon the limb, by means of a long piece of tape; putting under them, next to the skin of the animal, a quantity of lint to prevent the gutta percha from irritating the flesh. The tapes he also runs through the holes previously made, and winds about the limb, or over the splints—rather, but not too tightly in the first instance—with the intent of arousing the restorative amount of inflammation. This quantity of inflammation, the reader may imagine, would be certain to ensue on so violent an injury as the separation of the hard supports of the body; but in this he is mistaken. I have known a favorite hound to break at once the four metatarsal bones, and though the splints necessary to promote a union were kept on above two months, nothing of the kind took place; at the end of which time all bandages were removed, and his movements effected the cure which my appliances were unable to bring about. Some persons even advocate taking off all bandages from a broken leg, and sending the dog for a walk, where union is tardy; but people who use such language talk about that, concerning which they literally know nothing. It is not one walk which will produce the desired effect; but

repeated walks are required to accomplish what appears to the ignorant so certain to occur. Thus, to do nothing is far better in some cases than to perform much; since the absence of remedies accomplishes that which all the paraphernalia of the surgery is unable to produce.

There are cases, however, which cannot get well of themselves, unless deformity be esteemed of no consequence. Thus, when the radius and ulna are snapped right across, and the foot, deprived of all support, dangles at the end of the limb; here the interposition of surgical agency is absolutely required; for the fracture, if left to itself without the aid of art, would never assume its proper situation. So when the humerus or femur are fractured, the bones may unite of themselves; but in that case shortening of the limb and incurable lameness is certain to ensue. The practitioner aims not only to bring the separated ends of the bone together; but he endeavors, by the invention of various means, to keep them there, or to force the limb all the time of the cure to be and to remain at its fullest length. To prevent the tendency to contract in the limb, and consequently to shorten, is one of the chief difficulties which we have to contend with in the treatment of fractures. When a bone is broken, the muscles which hold the parts together sooner or later contract, and sometimes with such force as to draw the ends of the bone, which were once continuous, side by side; thus rendering the limb shorter than it was previously. This force is generally exerted immediately on the occurrence of the accident; but in some petted

animals where the system is slow, it does not take place till some indefinite period has elapsed. Fortunate is the gentleman who is called on to treat a case before anything of the kind has occurred, as his difficulties will thereby be at first materially lessened; but when putting on the splints, he must be careful that they are strong enough and his tapes tight enough to keep the leg extended, or to resist the power which sooner or later he may rest assured will start up.

The bandages and splints having been on some time—the precise period of which cannot be estimated,—the leg will swell, especially the foot, and the tapes become so tight as to cut into the flesh. The practitioner pays little attention to the primary indication of swelling being about to take place; but when it has fairly set in, and threatens to do injury to the limb, he with caution loosens the tapes, thus permitting the blood freely to circulate.

The after-treatment of a fracture is comparatively easy. It consists merely in keeping the bowels open, attending to the general health, and in renewing the splints and bandages as often as may be necessary.

It is well to bathe the fractured limb, splints and all, in the following lotions:—

LOTION FOR THE LEG BEFORE THE SWELLING HAS COMMENCED.

Tinct. arnic. mont. One drachm.

Aqua font. One ounce.

Ess. limon A sufficiency

To be applied frequently.

LOTION TO BE USED WHEN SWELLING IS PRESENT.

Tinct. aconit. Half-a-scruple.

Aqua font. One ounce.

Ess. anis. A sufficiency.

LOTION TO BE APPLIED AFTER THE SWELLING HAS SUBSIDED.

Zinchi chlor. One grain.

Aqua font. One ounce.

Ess. anis. A sufficiency.

The other measures are dictated entirely by circumstances.

OPERATIONS.

THERE are very few of such offices to be performed on the dog. Among those, however, which do occur, is the removal of the toe. When a claw has grown completely round, and by being pressed into the flesh appears, in the judgment of the practitioner, to have provoked such injury as decidedly and imperatively requires the removal of the part affected, then the amputation of one toe may be undertaken. When the dog, to allay the itching of the extremities, gnaws or eats his own flesh from the toes, leaving black and ragged bones protruding, amputation is necessary. The member must in each case be amputated higher up than the injury. There is no absolute necessity to muzzle the dog, provided the master is present, and will undertake the charge of the head. When such has been the case, and the master has engaged to keep the attention of the dog fixed upon himself, I have removed a joint or two from the leg with-

out the animal uttering a single cry ; although the master, unused to such sights, has been seized with sickness so as to require spirits for his restoration. The master being at the head, or an assistant on whom you can depend being at that post ; another placed to keep down the body ; and a third to lay hold of and extend the limb to be operated upon, which must be uppermost ; the animal should be thrown on one side. There it must be allowed to remain until sufficient time has elapsed to calm its natural fears.

The operator then takes one of Liston's sharp-pointed knives, and thrusts it quite through the flesh, a short distance above the injury ; he then with a sawing motion cuts downward and outward till the knife is released. He next impales the member on the other side, keeping the back of the knife, as on the former occasion, as close to the bone as possible, and draws it forth in the same manner. He thus will have two flaps divided by a small notch, which coincides with the breadth of the bone. Through this notch, on the uppermost side, he must pass his knife, cutting upwards and inwards ; thus upon both sides, till the lines made by the knife meet in a point. He will then, supposing the business to have been properly performed, see a bright pink living piece of bone in the centre ; and to cut off so much, or even a little more than is visible, becomes his next object. For this purpose a saw, however fine, is tedious ; because the bone to be cut through is not of sufficient body to allow the operator to put forth his strength, and on that account

also does not leave behind it a smooth surface. The bone-nippers answer better. Without loss of time, therefore, the veterinary surgeon seizes a pair suited to the object in view, and with these he gently pushes back the flesh on all sides ; he then, suddenly closing the handles, cuts short the protruding bone. The flaps that have been made are then brought together, when, if there is any bleeding, the raw surfaces are again exposed, and a few puffs with a pair of bellows, first having sprinkled the part with cold water, usually stop it. If that should not succeed, a small quantity of the tincture of ergot of rye suffices for the purpose ; and all bleeding having ceased, the flaps are finally placed together, bound up in soft lint, and a leather or gutta percha boot placed over all, no dressing being applied or the boot removed for three days. When the wound is inspected, if, as frequently happens, the movements of the dog have disturbed the flaps, provided they are not drawn too uneven, the practitioner had better not touch them. The rectifying powers of nature in such cases are wonderful ; and in those he had better trust rather than interfere with the process of healing, which he may remain certain has already commenced. In this fashion I have excised a dog's claw ; and three months after the operation a spectator would have to compare one foot with another to discover that either was deficient in the proper number of appendages.

CAPPED HOCK AND ELBOW.—The first of these is more rare than the last ; but as, on the point of the bone

in each joint, is situated a bursa or small sac, containing an unctuous fluid intended to facilitate the movement of the bone under the skin, they both are subject to injury ; when they swell to an enormous size, and constitute a very unsightly deformity. If seen early, so soon as the tenderness has subsided, an ounce of lard may be mixed with a drachm of the iodide of lead, and the part well and frequently rubbed with the ointment. If in spite of the use of this ointment, which more often fails than succeeds, the tumor grows larger and larger, recourse must be had to an operation ; else the disfigurement may ultimately become sufficiently great and hard to seriously impede the animal's movements.

An operation being determined on, the animal is best left standing ; though, should it prove unruly, assistance sufficient to lift it on to a table, and thereon to lay it on its side, must be at hand. Everything being ready, and the dog in this case properly muzzled, the operator, with such a knife as he can work quickest with, makes an incision the entire length of the swelling, and even rather longer than shorter : he next reflects back both portions of skin, that is, the skin on either side of the swelling ; and lastly, separates the enlargement from its base.

This removal will leave a huge, ugly, gaping wound, with a seeming superabundance of skin hanging from its side. Let him on no account remove a particle of that skin, however much more than is necessary properly to cover the wound there may immediately after the operation seem to be. Inflammation will, with the

beginning of the healing process, set in, and the action of this inflammation contracts the hanging skin; so that if a portion be removed, there will remain an open wound to that extent; and as skin is slowly reproduced, the cure may be retarded for months.

The first part of the business being well concluded, the dog must remain muzzled, and be returned to its proprietor with a bottle of healing fluid, the sore which has been made being left uncovered. The healing fluid is to be used frequently; and if the case be a good one, the orifice quickly becomes small, and heals. In some animals, however, there is a disposition to gnaw or lick the part; thus undoing everything the veterinary surgeon has been accomplishing. To check this habit, a cradle round the neck; wide collars which prevent the head from being turned round; and various splints which, by keeping the limb extended, thereby hinder the animal from touching the wound, are employed. Any or all of these, in untoward cases, may be necessary; and in very high-bred animals the healing powers of nature are frequently slow, consequently in such the after-consequences of an operation are likely to prove very annoying.



DOG BREAKING:

THE MOST
EXPEDITIOUS, EASY, AND CERTAIN
METHOD,

WHETHER GREAT EXCELLENCE OR ONLY MEDIOCRITY
BE REQUIRED.

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W. W. H. 20/24/7. DEL.

W. T. & EDWARDS. SC.

COCKERS.—BUTLER AND BRIST.



DOG-BREAKING.

CHAPTER I.

PRELIMINARY OBSERVATIONS. QUALIFICATIONS, IN BREAKER—IN DOG.

1. DOG-BREAKING, so far from there being any mystery in it, is an art easily acquired when it is commenced and continued on rational principles.

2. I think you will be convinced of this if you will have the patience to follow me, whilst I endeavor to explain what, I am satisfied, is the most certain and rapid method of breaking in your dogs, whether you require great proficiency in them, or **are** contented with an inferior education. No quicker system has yet been devised, however humble the education may be. The education in fact of the peasant, and that of the future double-first collegian, begin and proceed on the same principle. You know your own circumstances, and you must yourself determine what time you choose to devote to them; and, as a consequence, the degree of excellence to which you aspire. I can only assure you of my firm conviction, that no other means will enable you to

gain your object so quickly, and I speak with a confidence derived from long experience in many parts of the world, on a subject that was, for several years, my great hobby.*

3. Every writer is presumed to take some interest in his reader; I therefore feel privileged to address you as a friend, and will commence my lecture by strongly recommending, that, if your occupations will allow it, you take earnestly and heartily to educating your dogs yourself. If you possess temper and some judgment, and will implicitly attend to my advice, I will go bail for your success, and, much as you may now love shooting, you will then like it infinitely more. Try the plan I recommend, and I will guarantee that the Pointer or Setter Pup which I will, for example sake, suppose to be now in your kennel, shall be a better dog by the end of next season—I mean a more killing dog—than probably any you ever yet shot over.

4. Possibly you will urge, that you are unable to spare the time which I consider necessary for giving him a high education—brief as that time is, compared

* It may be satisfactory to others to know the opinion of so undeniable an authority as Colonel Hawker. The Colonel, in the Tenth Edition of his invaluable Book on Shooting, writes—page 285—“Since the publication of the last edition, Lieut.-Col. Hutchinson’s valuable work on ‘Dog-breaking’ has appeared. It is a perfect *vade mecum* for both Sportsmen and Keeper, and I have great pleasure in giving a cordial welcome to a work which so ably supplies my own deficiencies”

with the many, many months wasted in the tedious methods usually employed—and that you must, perforce, content yourself with humbler qualifications. Be it so. I can only condole with you, for in your case this may be partly true; mind, I only say *partly* true. But how a man of property, who keeps a regular gamekeeper, can be satisfied with the disorderly, disobedient troop to which he often shoots, I cannot understand. Where the gamekeeper is permitted to accompany his master in the field, and hunt the dogs himself, there can be no valid excuse for the deficiency in their education. The deficiency must arise either from the incapacity, or from the idleness of the keeper.

5. Unlike most other arts, dog-breaking does not require much experience; but such a knowledge of dogs, as will enable you to discriminate between their different tempers and dispositions, I had almost said characters—and they vary greatly—is very advantageous. Some require constant encouragement; some you must never beat; whilst, to gain the required ascendancy over others, the whip must be occasionally employed. Nor is it necessary that the instructor should be a very good shot; which probably is a more fortunate circumstance for me than for you. It should even be received as a principle that birds ought to be now and then missed to young dogs, lest some day, if your nerves happen to be out of order, or a cockney companion be harmlessly blazing away, your dog take it into his head and heels to run home in dis

gust, as I have seen a bitch, called Countess, do more than once, in Haddingtonshire.

6. The chief requisites in a breaker are :—Firstly, command of temper, that he may never be betrayed into giving one unnecessary blow, for with dogs, as with horses, no work is so well done as that which is done cheerfully ; secondly, consistency, that in the exhilaration of his spirits, or in his eagerness to secure a bird, he may not permit a fault to pass unproved, I do not say *unpunished*, which at a less exciting moment he would have noticed—and that, on the other hand, he may not correct a dog the more harshly because the shot has been missed, or the game lost ; and lastly, the exercise of a little reflection, to enable him to judge what meaning an unreasonable animal is likely to attach to every word and sign, nay to every look.

7. With the coarsest tackle, and worst flies, trout can be taken in unflogged waters, while it requires much science, and the finest gut, to kill persecuted fish. It is the same in shooting. With almost any sporting-dog game can be killed early in the season, when the birds lie like stones, and the dog can get within a few yards of them ; but you will require one highly broken to obtain many shots when they are wild. Then any incautious approach of the dog, or any noise, would flush the game, and your own experience will tell you that nothing so soon puts birds on the run, and makes them so ready to take flight, as the sound of the human voice, especially now-a-days, when farmers generally

prefer the scythe to the sickle, and clean husbandry, large fields, and trim narrow hedges—affording no shelter from wet—have forced the partridge—a *short-winged** bird—unwillingly to seek protection, when arrived at maturity, in ready flight rather than in concealment. Even the report of a gun does not so much alarm them as the command, “Toho,” or “Down charge,” usually too, as if to make matters worse, hallooed to the extent of the breaker’s lungs. There are anglers who recommend silence as conducive to success, and there are no experienced sportsmen who do not acknowledge its great value in shooting. Rate or beat a dog at one end of a field, and the birds at the other will lift their heads, become uneasy, and be ready to take wing the moment you get near them. “Penn,” in his clever maxims on Angling and Chess, observes to this effect, “if you wish to see the fish, do not let him see you ;” and with respect to shooting, we may as truly say, “if you wish birds to hear your gun, do not let them hear your voice.” Even a loud whistle disturbs them. Mr. O——t of C——e says a gamekeeper’s motto ought to be,—“No whistling—no whipping—no noise, when master goes out for sport.”

8. These observations lead unavoidably to the infer-

* The American Quail so closely resembles the English partridge in all its habits, except that it takes to covert in large woodlands, and occasionally *trees*, that all the rules of hunting and beating for it, shooting it, and breaking dogs for its pursuit, are entirely identical.—H. W. H.

ence, that no dog can be considered perfectly broken, that does not make his point when first he feels assured of the presence of game, and remain stationary *where he makes it*, until urged on by you to draw nearer—that does not, as a matter of course, lie down without any word of command the moment you have fired, and afterwards perseveringly seek for the dead bird in the direction you may point out—and all this without your once having occasion to speak, more than to say in a low voice, “Find,” when he gets near the dead bird, as will be hereafter explained. Moreover, it must be obvious that he risks leaving game behind him if he does not hunt every part of a field, and, on the other hand, that he wastes your time and his strength, if he travels twice over the same ground, nay, over any ground which his powers of scent have already reached. Of course I am now speaking of a dog hunted without a companion to share his labors.

9. You may say, “How is all this, which sounds so well in theory, to be obtained in practice without great severity?” Believe me, with severity it never can be attained. If flogging would make a dog perfect, few would be found unbroken in England or Scotland, and scarcely one in Ireland.

10. Astley’s method was to give each horse his preparatory lessons alone, and when there was no noise or anything to divert his attention from his instructor. If the horse was interrupted during the lesson, or his attention in any way withdrawn, he was dismissed for that

day. When perfect in certain lessons by himself, he was associated with other horses whose education was further advanced. And it was the practice of that great master to reward his horses with slices of carrot or apple when they performed well.

11. Astley may give us a useful hint in our far easier task of dog-breaking. We see that he endeavored by kindness and patience to make the horse thoroughly comprehend the meaning of certain words and signals before he allowed him any companion. So ought you, by what may be termed "initiatory lessons," to make your young dog perfectly understand the meaning of certain words and signs before you hunt him in the company of another dog—nay, before you hunt him at all; and, in pursuance of Astley's plan, you ought to give these lessons when you are alone with the dog, and his attention is not likely to be withdrawn to other matters. Give them, also, when he is fasting, as his faculties will then be clearer, and he will be more eager to obtain any rewards of biscuit or other food.

12. Be assured that by a consistent adherence to the simple rules which I will explain, you can obtain the perfection I have described, 8, with more ease and expedition than you probably imagine to be practicable; and, if you will zealously follow my advice, I promise, that, instead of having to give up your shooting in September—for I am supposing you to be in England—while you break in your pup, you shall then be able to take him into the field, provided he is tolerably well bred

and well disposed, perfectly obedient ; and, except that he will not have a well-confirmed, judicious range, almost perfectly made ; at least so far made, that he will only commit such faults as naturally arise from want of experience. Let me remind you also that the keep of dogs is expensive, and supplies an argument for making them earn their bread by hunting to a *useful* purpose so soon as they are of an age to work without injury to their constitution. Time, moreover, is valuable to us all, or most of us fancy it is. Surely, then, that system of education is best which imparts the most expeditiously the required degree of knowledge.

CHAPTER II.

INITIATORY LESSONS WITHIN DOORS. SHOOTING PONIES.

13. It is seldom of any advantage to a dog to have more than one instructor. The methods of teaching may be the same ; but there will be a difference in the tone of voice and in the manner that will more or less puzzle the learner, and retard rather than advance his education. If, therefore, you resolve to break in your dog, do it entirely yourself ; let no one interfere with you.

14. As a general rule, let his education begin when he

is about six or seven months old*—although I allow that some dogs are more precocious than others, and bitches always more forward than dogs—but it ought to be nearly completed before he is shown a bird (111). A quarter of an hour's daily in-door training—called by the Germans “house-breaking”—for three or four weeks will effect more than a month's constant hunting without preliminary tuition.

15. Never take your young dog out of doors for instruction, until he has learnt to know and obey the several words of command which you intend to give him in the field, and is well acquainted with all the signs which you will have occasion to make to him with your arms. These are what may be called the initiatory lessons.

16. Think a moment, and you will see the importance of this preliminary instruction, though rarely imparted. Why should it be imagined that at the precise moment when a young dog is enraptured with the first sniff of game, he is, by some mysterious unaccountable instinct, to understand the meaning of the word “Toho?” Why should he not conceive it to be a word of encouragement

* But from his very infancy you ought not to have allowed him to be disobedient. You should have made him know—which he will do nearly intuitively—that a whip can punish him, though he ought never to have *suffered* from it. I have heard of pups only four months old being made quite *au fait* to the preliminary drill here recommended. This early exercise of their intelligence and observation must have benefited them. The questionable point is the unnecessary consumption of the instructor's time.

to rush in upon the game, as he probably longs to do ; especially if it is a partridge fluttering before him, in the sagacious endeavor to lure him from her brood, or a hare enticingly cantering off from under his nose ? There are breakers who would correct him for not intuitively comprehending and obeying the "Toho," roared out with stentorian lungs ; though, it is obvious, the youngster, from having had no previous instruction, could have no better reason for understanding its import than the watch-dog chained up in the adjacent farm-yard. Again he hears the word "Toho"—again followed by another licking, accompanied perhaps by the long lecture, "Ware springing birds, will you ?" The word "Toho" then begins to assume a most awful character ; he naturally connects it with the finding of game, and not understanding a syllable of the lecture, lest he should a third time hear it, and get a third drubbing, he judges it most prudent, unless he is a dog of very high courage, when next aware of the presence of birds, to come in to heel ; and thus he commences to be a blinker, thanks to the sagacity and intelligence of his tutor. I do not speak of all professional dog-breakers,—far from it. Many are fully sensible that comprehension of orders must necessarily precede all but accidental obedience. I am only thinking of some whom it has been my misfortune to see, and who have many a time made my blood boil at their brutal usage of a fine high-couraged young dog. Men who had a strong arm and hard heart to punish—but no temper and no head to instruct.

17. So long as you are a bachelor, you can make a companion of your dog, without incurring the danger of his being spoilt by your wife and children; the more, by-the-bye, he is your own companion and nobody else's the better: and it is a fact, though you may smile at the assertion, that all the initiatory lessons can be, and can best be inculcated in your own breakfast-room.

18. Follow Astley's plan. Let no one be present to distract the dog's attention. Call him to you by the whistle you propose always using in the field. Tie a slight cord a few yards long to his collar. Throw him a small piece of toast or meat, saying at the time, "Dead, dead." Do this several times, chucking it into different parts of the room, and let him eat what he finds. Then throw a piece, always as you do so saying, "Dead," and the moment he gets close to it, check him by jerking the cord, at the same time saying, "Toho," and lifting up your right arm almost perpendicularly. By pressing on the cord with your foot, you can restrain him as long as you please. Do not let him take what you have thrown until you give him the encouraging word, "On," accompanied by a forward movement of the right arm and hand, somewhat similar to the swing of an under-hand bowler at cricket.

19. Let all your commands be given in a low voice. Consider that in the field, where you are anxious not to alarm the birds unnecessarily, your words must reach your dogs' ears more or less softened by distance, and, if their influence depends on loudness, they will have the

least effect at the very moment when you wish them to have the most. For the same reason, in the initiatory lessons, be careful not to whistle loudly.

20. After a few trials with the checkcord, you will find yourself enabled, without touching it, and merely by using the word "Toho," to prevent his seizing the toast or meat, until you say "On," or give him the forward signal. When he gets yet more perfect in his lesson, raising your right arm only, without employing your voice, will be sufficient, especially if you have gradually accustomed him to hear you speak less and less loudly. If he draw towards the bread before he has obtained leave, jerk the cord, and *drag him back to the spot from which he stirred*. He is not to quit it until you order him, occupy yourself as you may. Move about, and occasionally go from him, as far as you can, before you give the command "On." This will make him less unwilling hereafter to continue steady at his point while you are taking a circuit to head him, and so get wild birds between him and your gun,—179, 196. The signal for his advancing, when you are facing him, is the "beckon"—see 33.

21. At odd times let him take the bread the moment you throw it, that his eagerness to rush forward to seize it may be continued, only to be instantly restrained at your command.

22. Your *left* arm raised perpendicularly, in a similar manner, should make the young dog lie down. Call out "Drop," when so holding up the left hand, and press

him down with the other until he assumes a crouching position. If you study beauty of attitude, his fore-legs should be extended and his head rest between them. Make him lie well down, occasionally walking round and round him, gradually increasing the size of the circle—your eyes on his. Do not let him raise himself to a sitting posture. If you do, he will have the greater inclination hereafter to move about: *especially when you want to catch him in order to chide or correct him.* A stop is all you require for the “Toho,” and you would prefer his standing to his point, rather than his lying down,* as you then would run less risk of losing sight of him in cover, heather, or high turnips, &c. Setters, however, naturally crouch so much more than Pointers, that you will often not be able to prevent their “falling” when they are close to game. Indeed, I have heard some sportsmen argue in favor of a dog’s dropping, “that it rested him.” An advantage, in my opinion, in no way commensurate with the inconvenience that often attends the practice.

23. If you are satisfied with teaching him in a slovenly manner, you can employ your right arm both for the “Toho” and “Drop;” but that is not quite correct, for the former is a natural stop—being the pause to deter-

* This is one reason for giving initiatory lessons in the “Toho” before the “Drop.” Another is that the dog may acquire the “Toho” before he has run the chance of being cowed in learning the “Drop.” If the latter were taught first, he might confound the “Toho” with it.

mine exactly where the game is lying, preparatory to rushing in to seize it—which you prolong by art,* whilst the other is wholly opposed to nature. The one affords him great delight, especially when, from experience, he has learnt well its object: the latter is always irksome. Nevertheless, it must be firmly established. It is the triumph of your art. It ensures future obedience. But it cannot be effectually taught without creating more or less awe, and it should create awe. It is obvious, therefore, that it must be advantageous to make a distinction between the two signals—especially with a timid dog—for he will not then be so likely to blink on seeing you raise your right hand when he is drawing upon game. Nevertheless, there are breakers so unreasonable as not only to make that one signal, but the one word “Drop,” or rather “Down,” answer both for the order to point, and the order to crouch! How can such tuition serve to enlarge a dog’s ideas?

24. To perfect him in the “Down,” that difficult part of his education,—difficult, because it is unnatural,—practise it in your walks. At very uncertain, unexpected times catch his eye, having previously stealthily taken hold of the checkcord—a long, light one, or a whistle to call his attention, and then hold up your left arm. If he does not *instantly* drop, jerk the checkcord violently,

* I know of a young man’s reading the first edition of this book, and taking it into his head to teach his Terrier to point according to the method just recommended. He succeeded perfectly. Some Terriers have been made very useful for cover shooting.

and, as before, drag him back to the exact spot where he should have crouched down. Admit of no compromise. You must have *implicit, unhesitating, instant* obedience. When you quit him, he must not be allowed to crawl *an inch* after you. If he attempt it, drive a spike into the ground, and attach the end of the checkcord to it, allowing the line to be slack; then leave him quickly, and on his running after you he will be brought up with a sudden jerk. So much the better; it will slightly alarm him. As before, take him back to the precise place he quitted—do this invariably, though he may have scarcely moved. There make him again “Drop”—always observing to jerk the cord at the moment you give the command. After a few trials of this tethering, say less than a dozen, he will be certain to lie down steadily, until you give the proper order or a signal—20—let you run away, or do what you may to excite him to move. One great advantage of frequently repeating this lesson, and thus teaching it *thoroughly*, is that your dog will hereafter always feel, more or less, in subjection whenever the cord is fastened to his collar. He must be brought to instantly obey the signal, even at the extreme limit of his beat.

25. Most probably he will not at first rise when he is desired. There is no harm in that—a due sense of the inutility of non-compliance with the order of “Drop,” and a wholesome dread of the attendant penalty, will be advantageous. Go up to him—pat him—and lead him for some paces, “making much of him,” as they say in

the cavalry. Dogs which are over-headstrong and resolute can only be brought under satisfactory command by this lesson being indelibly implanted—and I think a master before he allows the keeper to take a pup into the field to show him game, should insist upon having ocular demonstration that he is perfect in the “Drop.”

26. When he is well confirmed in this all-important lesson, obeying implicitly, yet cheerfully, you may, whilst he is lying down—in order to teach him the “down charge”—go through the motions of loading, on no account permitting him to stir until you give him the forward signal, or say, “On.” After a few times you may fire off a copper cap, and then a little powder, but be very careful not to alarm him. Until your dog is quite reconciled to the report of a gun, never take him up to any one who may be firing. I have, however, known of puppies being familiarized to the sound, by being at first kept at a considerable distance from the party firing, and then gradually and by slow degrees brought nearer. This can easily be managed at a rifle or pigeon match, and the companionship of a made-dog would much expedite matters. Whenever, in the lessons, your young dog has behaved steadily and well, give him a reward. Do not throw it to him: let him take it from your hands. It will assist in making him tender-mouthed, and in attaching him to you.

27. In some cavalry regiments in India, the feeding-time is denoted by the firing off of a pistol. This soon changes a young horse's first dread of the report into

eager, joyous expectation. You might, if you did not dislike the trouble, in a similar manner, soon make your pup regard the report of a gun as the gratifying summons to his dinner, but coupled with the understanding that, as a preliminary step, he is to crouch the instant he hears the sound. After a little perseverance you would so well succeed, that you would not be obliged even to raise your hand. If habituated to wait patiently at the "drop," however hungry he may be, before he is permitted to taste his food, it is reasonable to think he will remain at the "down charge," yet more patiently before he is allowed to "seek dead."

28. If your pupil is unusually timid, and you cannot banish his alarm on hearing the gun, couple him to another dog which has no such foolish fears, and will steadily "down charge." The confidence of the one will impart confidence to the other. Fear and joy are feelings yet more contagious in animals than in man. It is the visible, joyous animation of the old horses, that so quickly reconciles the cavalry colt to the sound of the "feeding-pistol."

29. A keeper who had several dogs to break, would find the advantage of pursuing the cavalry plan just noticed. Indeed, he might extend it still further, by having his principal in-door drill at feeding-time, and by enforcing, but in minuter details, that kennel discipline which has brought many a pack of hounds to marvellous obedience. He should place the food in different parts of the yard. He should have a short checkcord on all

his pupils ; and, after going slowly through the motions of loading (the dogs having regularly “down-charged” on the report of the gun), he should call each separately by name, and by signals of the hand send them successively to different, but designated feeding-troughs.* He might then call a dog to him which had commenced eating, and after a short abstinence, make him go to another trough. He might bring two to his heels and make them change troughs, and so vary the lesson, that, in a short time, with the aid of the checkcords, he would have them under such complete command that they would afterwards give him comparatively but little trouble in the field. As they became more and more submissive he would gradually retire further and further, so as, at length, to have his orders obeyed when at a considerable distance from his pupils. The small portion of time these lessons would occupy compared with their valuable results should warn him most forcibly not to neglect them.

CHAPTER III.

INITIATORY LESSONS CONTINUED. SPANIELS.

30. WHEN your young dog is tolerably well advanced in the lessons which you have been advised to practise,

* There is often such a similarity in the names of hounds, that a person cannot but be much struck, who for the first time sees them go to their meals, one by one as they are called.

hide a piece of bread or biscuit. Say "Dead, dead." Call him to you. (40.) Let him remain by you for nearly a minute or two. Then say "Find," or "Seek." Accompany him in his search. By your actions and gestures make him fancy you are yourself looking about for something, for dogs are observing, one might say, imitative, creatures.* Stoop and move your right hand to and fro near the ground. Contrive that he shall come upon the bread, and reward him by permitting him to eat it.

31. After a little time—a few days I mean—he will show the greatest eagerness on your saying, at any unexpected moment, "Dead." He will connect the word with the idea that there is something very desirable concealed near him, and he will be all impatience to be off and find it; *but make him first come to you*—for reason, see 182.—Keep him half a minute.—Then say "Find," and, without your accompanying him, he will search for what you have previously hidden. Always let him be encouraged to perseverance by discovering something acceptable.

32. Unseen by him, place the rewards—one at a time—in different parts of the room,—under the rug or carpet, and more frequently on a chair, a table, or a low shelf.

* Imitative creatures! who can doubt it? If you make an old dog perform a trick several times in the sight of a young one who is watching the proceedings, you will be surprised to see how quickly the young one will learn the trick, especially if he has seen that the old dog was always rewarded for his obedience.

He will be at a loss in what part of the room to search. Assist him by a motion of your arm and hand. A wave of the right arm and hand to the right, will soon show him that he is to hunt to the right, as he will find there. The corresponding wave of the left hand and arm to the left, will explain to him, that he is to make a cast to the left. The underhand bowler's swing of the right hand and arm, will show that he is to hunt in a forward direction.* Your occasionally throwing the delicacy—in the direction you wish him to take,—whilst waving your hand, will aid in making him comprehend the signal. You may have noticed how well, by watching the action of a boy's arm, his little cur judges towards what point to run for the expected stone.

33. When the hidden object is near you, but between you and the dog, make him come towards you to seek for it, beckoning him with your right hand. When he is at a distance at the "Drop," if you are accustomed to recompense him for good behavior, you can employ this signal to make him rise and run towards you for his re-

* Obedience to all such signals will hereafter be taught out of doors at gradually increased distances: and to confirm him in the habit of sniffing high in the air (37) for whatever you may then hide, put the bread or meat on a stick or bush, but never in a hedge. With the view to his some day retrieving, as instanced in 190, it will be your aim to get him not to seek immediately, but to watch your signals, until by obeying them you will have placed him close to where the object lies, at which precise moment you will say energetically "Find," and cease making any further signs.

ward--and according to my judgment he should always join you after the "down charge,"—184. By these means you will thus familiarize him with a very useful signal; for that signal will cause him to approach you in the field, when you have made a circuit to head him at his point—knowing that birds will then be lying somewhere between you and him—and want him to draw nearer to the birds and you, to show you exactly where they are. This some may call a superfluous refinement, but I hope *you* will consider it a very killing accomplishment, and, being easily taught, it were a pity to neglect it. When a Setter is employed in cock-shooting, the advantage of using this signal is very apparent. While the dog is steadily pointing, it enables the sportsman to look for a favorable opening, and, when he has posted himself to his satisfaction, to sign to the Setter—or if out of sight to tell him—to advance and flush the bird: when, should the sportsman have selected his position with judgment, he will generally get a shot. I have seen this method very successfully adopted in America, where the forests are usually so dense that cocks are only found on the outskirts in the underwood.

34. After a little time he will regularly look to you for directions. Encourage him to do so; it will make him hereafter, when he is in the field, desirous of hunting under your eye, and induce him to look to you, in a similar manner, for instructions in what direction he is to search for game. Observe how a child watches its mother's eye; so will a dog watch yours, when he be-

comes interested in your movements, and finds that you frequently notice him.

35. Occasionally, when he approaches any of the spots where the bread lies hidden, say "Care," and slightly raise your right hand. He will quickly consider this word, or signal, as an intimation that he is near the object of his search.

36. Never deceive him in any of these words and signs, and never disappoint him of the expected reward. Praise and caress him for good conduct; rate him for bad. Make it a rule throughout the whole course of his education, out of doors as fully as within, to act upon this system. You will find that caresses and substantial rewards are far greater incentives to exertion than any fears of punishment.

37. Your pup having become a tolerable proficient in these lessons, you may beneficially extend them by employing the word "Up," as a command that he is to sniff high in the air to find the hidden bread or meat, lying, say on a shelf, or on the back of a sofa. He will, comparatively speaking, be some time in acquiring a knowledge of the meaning of the word, and many would probably term it an over-refinement in canine education; but I must own I think you will act judiciously if you teach it perfectly in the initiatory lessons; for the word "Up," if well understood, will frequently save your putting on the puzzle-peg. For this you might be tempted to employ, should your dog be acquiring the execrable habit of "raking," as it is termed, instead of

searching for the delicious effluvia with his nose carried high in the air.

38. Whenever birds can be sought for in the wind, the dog should thus hunt the field—and the higher he carries his nose the better—for, independently of the far greater chance of finding them, they will allow the dog to come much nearer than when he approaches them by the foot: but of this more anon.

39. Setters and Pointers naturally hunt with their noses sufficiently close to the ground—they want elevating rather than depressing. Notwithstanding, you will do well to show your pupil a few times out of doors how to work out a scent, by dragging a piece of bread unperceived by him *down wind* through grass, and then letting him “foot” it out. Try him for a few yards at first; you can gradually increase the length of the drag. You must not, however, practise this initiatory lesson too frequently, lest you give him the wretched custom of pottering.

40. The word “Heel,” and a backward low wave of the right hand and arm to the rear—the reverse of the underhand cricket-bowler’s swing—will, after a few times, bring the dog close behind you. Keep him there a while and pat him, but do not otherwise reward him. The object of the order was to make him instantly give up hunting, and come to your heels. This signal cannot be substituted for the “beckon.” The one is an order always obeyed with reluctance—being a command to leave off hunting—whereas the “beckon” is merely an

instruction in what direction to beat, and will be attended to with delight. The signal "heel," however, when given immediately after loading, is an exception; for the instructions about "Dead" in xi. of 141, will show that without your speaking it may be made to impart the gratifying intelligence of your having killed. See also 190.

41. To teach him to attach a meaning to the word "Gone," or "Away," or "Flown,"*—select which you will, but do not ring the changes—you may now rub a piece of meat—if you have no one but your servant to scold you—in some place where the dog is accustomed frequently to find, and when he is sniffing at the place say "Gone," or "Away." This he will, after some trials, perceive to be an intimation that it is of no use to continue hunting for it.

42. You will greatly facilitate his acquiring the meaning of the command "Fence," or "Ware-fence," if, from time to time, as he is quitting the room through the open door or garden window, you restrain him by calling out that word.

43. Whenever, indeed, you wish him to desist from doing anything, call out "Ware,"—pronounced "War"—as it will expedite his hereafter understanding the terms "Ware sheep," "Ware chase," and "Ware lark." The last expression to be used when he is wast-

* The least comprehensive and logical of the expressions, yet one often used. A dog being no critical grammarian, understands it to apply to fur as well as feather.

ing his time upon the scent of anything but game—a fault best cured by plenty of birds being killed to him. However, the simple word “No,” omitting “Chase” or “Fence,” might be substituted advantageously for “Ware.” All you want him to do is to desist from a wrong action. That sharp sound—and when necessary it can be clearly thundered out—cannot be misunderstood.

44. That your young dog may not hereafter resist the couples, yoke him occasionally to a stronger dog, and for the sake of peace, and in the name of all that is gallant, let it be to the one of the other sex who appears to be the greatest favorite.

45. When he is thus far advanced in his education, and tolerably obedient, which he will soon become if you are consistent, and *patient, yet strict*, you can, in further pursuance of Astley’s plan, associate him in his lessons with a companion. Should you be breaking in another youngster—though one at a time you will probably find quite enough, especially if it be your laudable wish to give him hereafter a well confirmed scientific range—they can now be brought together for instruction. You must expect to witness the same jealousy which they would exhibit on the stubble. Both will be anxious to hunt for the bread, and in restraining them alternately from so doing, you exact the obedience which you will require hereafter in the field, when in their natural eagerness they will endeavor, unless you properly control them, to take the point of birds from one

another; or, in their rivalry, run over the taint of a wounded bird, instead of collectedly and perseveringly working out the scent. You can throw a bit of toast, and make them "Toho" it, and then let the dog you name take it. In the same way you can let each alternately search for a hidden piece, after both have come up to you, on your saying "Dead." I would also advise you to accustom each dog to "drop," without any command from you, the moment he sees that the other is down.

46. Those lessons will almost ensure their hereafter instantly obeying, and nearly instantly comprehending the object of the signal to "back" any dog which may be pointing game.

47. When you take out two youngsters for exercise, while they are romping about, suddenly call one into "heel." After a time again send him off on his gambols. Whistle to catch the eye of the other, and signal to him to join you. By working them thus alternately, while they are fresh and full of spirits, you will habituate them to implicit obedience. When the birds are wild, and you are anxious to send a basket of game to a friend, it is very satisfactory to be able merely by a sign, without uttering a word, to bring the other dogs into "heel," leaving the ground to the careful favorite. Teach the present lesson well, and you go far towards attaining the desired result.

48. I trust you will not object to the minutiae of these initiatory lessons, and fancy you have not time to

attend to them. By teaching them well you will gain time,—much time,—and the time that is of most value to you as a sportsman; for when your dog is regularly hunting to your gun his every faculty ought to be solely devoted to finding birds, and his undisturbed intellects exclusively given to aid you in bagging them, instead of being bewildered by an endeavor to comprehend novel signals or words of command. I put it to you as a sportsman, whether he will not have the more delight and ardor in hunting, the more he feels that he understands your instructions? and, further, I ask you, whether he will not be the more sensitively alive to the faintest indication of a haunt, and more readily follow it up to a sure find, if he be unembarrassed by any anxiety to make out what you mean, and be in no way alarmed at the consequences of not almost instinctively understanding your wishes?

49. In all these lessons, and those which follow in the field, the checkcord will wonderfully assist you. Indeed it may be regarded as the instructor's right hand. It can be employed so mildly as not to intimidate the most gentle, and it can, without the aid of any whip, be used with such severity, or I should rather say perseverance, as to conquer the most wild and headstrong, and these are sure to be dogs of the greatest travel and endurance. The cord may be from ten to twenty-five* yards

* With a resolute, reckless, dashing dog you may advantageously employ a *thinner* cord of double that length,—whereas, the shortest

long, according to the animal's disposition, and may be gradually shortened as he gets more and more under command. Even when it is first employed you can put on a shorter cord if you perceive that he is becoming tired. In thick stubble, especially if cut with a sickle, the drag will be greater, far greater than when the cord glides over heather. The cord may be of the thickness of what some call strong lay-cord, but made of twelve threads. Sailors would know it by the name of log-line or cod-line. To save the end from fraying it can be whipped with thread, which is better than tying a knot, because it is thus less likely to become entangled.

50. Hunted with such a cord, the most indomitable dog, when he is *perfectly obedient to the "drop,"* is nearly as amenable to command as if the end of the line were in the breaker's hand. By no other means can

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be *quickly* broken in. The general object of the trainer is to restrain them from ranging at a distance likely to spring game out of gun-shot, and to make them perfect to the "down charge." If one of these high-spirited animals will not range close when called to by whistle

line will sometimes prevent a timid animal from ranging freely. By-the-bye, the thinner the cord the more readily does it become entangled—as a rule, a checkcord cannot be too firmly twisted—a soft one quickly gets knotted and troublesome. (See note to 177.)

or name, the breaker gets hold of the cord and jerks it ; this makes the dog come in a few paces ; another jerk or two makes him approach closer, and then the breaker, by himself retiring with his face towards the spaniel, calling out his name—or whistling,—and occasionally jerking the cord, makes him quite submissive, and more disposed to obey on future occasions.

51. In training a large team it is of much advantage to the keeper to have a lad to rate, and, when necessary, give the skirter a taste of the lash—in short, to act as whipper-in. The keeper need not then carry a whip, or at least often use it, which will make his spaniels all the more willing to hunt close to him.

52. Lord A——r's head gamekeeper was singularly aided—he possessed a four-legged whipper-in. Three years since while Mr. D——s—M.P. for a South Eastern County—was with a shooting party at his Lordship's, the keeper brought into the field a brace of powerful retrievers, and a team of spaniels, among which were two that had never been shot over. On the first pheasant being killed all the old spaniels dropped to shot, but one of the young ones rushed forward and mouthed the bird. The person who had fired ran on to save the bird, but the keeper called aloud, and requested him not to move. The man then made a signal to one of the retrievers to go. He did so instantly, but, instead of meddling with the bird, he seized the spaniel, lifted him up, and shook him well. The moment the pup could escape he came howling to the “heels” of

the keeper, and lay down among his companions. The keeper then confessed that a couple of the spaniels had never been shot to—but he confidently assured the sportsmen they would see before the day was over that the pups behaved fully as steadily as the old dogs, and explained to the party how the retriever did all the disagreeable work, and indeed nearly relieved him of every trouble in breaking in the youngsters. On the next few shots this novel schoolmaster was again deputed to show his pupils that he would not allow his special duties as a retriever to be interfered with. Both the young dogs, having been thus well chastised, became more careful—made only partial rushes to the front, when a recollection of their punishment and a dread of their four-footed tutor brought them slinking back to their older companions. As the keeper had averred, they soon learned their lesson completely—gave up all thought of chasing after shot, and quietly crouched down with the other dogs.

53. I can easily imagine that it was a feeling of jealousy which first prompted the retriever to thrash some spaniel who was endeavoring to carry off a bird, and that the clever keeper encouraged him in doing so, instantly perceiving the value of such assistance. It is worth a consideration whether it would not be advisable to train the retriever employed with a team to give this assistance. A dog of a quarrelsome disposition could be taught, by your urging him, to seize any spaniel who might be mouthing a bird, in the same manner you would set on a young terrier to fly at a rat.

54. Doubtless it is the *highest* training to teach a team to "down-charge," but most breakers make their spaniels come into "heel," or rather gather close around them—by the word "round"—whenever a gun is discharged. This plan, though so injudicious in the case of pointers or setters, is but little objectionable in the case of spaniels, for spaniels in their small sweep inwards are not likely to spring game while the guns are unloaded. It certainly possesses this merit, that it is readily taught to puppies—with the aid of a whipper-in—by the trainer's giving them some delicacy on their rejoining him. It may be urged too that the method much removes any necessity for noise in calling to a dog—whereas, with a team trained to the "down-charge," however highly broken, it will occasionally happen that the keeper—or assistant—has to rate some excited skirter for not instantly "dropping." Moreover, in thick cover, an infraction of the irksome rule to "down charge" may sometimes escape detection, which might lead to future acts of insubordination. Prince Albert's team of Clumbers "down-charge," but the greatest attention is paid to them. They are admirably broken, and I may add, are shot over by a first-rate hand.

55. When exercising young spaniels it is a good plan to habituate them, even as puppies, never to stray further from you than about twenty yards. With them, even more than with other kinds of dogs trained for the gun, great pains should be taken to prevent their having the opportunity of "self-hunting." If it is wished to

break from hare, the method to be followed is mentioned in 233, &c., for with spaniels as with setters—or pointers—it is always advisable to drag them back to the spot from which they started in pursuit.

56. Occasionally you may see a country blacksmith when preparing to shoe the hind legs of a cart horse that appears disposed to make a disagreeable use of his heels, twist the long hair at the end of his tail,—raise the foot that is to be shod,—pass the twisted hair round the leg immediately above the hock, and by these means press the tendon close to the bone. The tail assists in retaining the leg in position, and thus, for the time, the limb is rendered powerless. Acting much upon this coercive principle, but discarding the aid of the tail, some breakers *slightly* confine a hind-leg of their most unruly spaniels with a soft bandage, shifting it from one leg to the other about every hour. Possibly a loop of vulcanized india-rubber, being elastic, would best answer the purpose. Restrained in this manner a dog is less likely to tumble about, and become injured, than if one of his fore legs had been passed through his collar. Other breakers, when hunting many couple together, fasten a belt with a few pounds of shot round the necks of the wildest. But the sooner such adjuncts to discipline can be safely discarded the better; for “brushing” a close cover is severe work. Gorse is the most trying.* Its prickles are so numerous and fine that

* There is no gorse in America. It is a prickly shrub, severe

the ears and eyes of every spaniel hunted in it ought to be separately examined on returning home, and well bathed in warm water. Their eyes are peculiarly liable to be injured by dust and gravel from their hunting so close to the ground.

57. To give young spaniels sufficient courage to face the most entangled cover, a judicious trainer will occasionally introduce them to thick brakes, or gorse, early in the morning, or in the evening, when the noise of his approach will have made the pheasants feeding in the neighborhood run far into it for shelter. The effluvia of the birds will then so excite the young dogs, especially if cheered with good companionship—which always creates emulation—that they will utterly disregard the pricks and scratches of the strongest furze.

58. If the time of year will permit, they should be shown game when about nine or ten months old. At a more advanced age they would be less amenable to control. Happily the example of a riotous pup will not be as detrimental to the discipline of the rest of the team as the example of an ill-conducted companion would be to a pointer—or setter—for the influence of thoroughly steady spaniels makes the pup curtail his range sooner than might be expected. Finding that he is not followed by his associates he soon rejoins them.

59. A judicious breaker will regard perfection in the

enough, but nothing to compare to catbriars, or even to the hollies of Southern Jersey.—H. W. H.

“drop”—22 to 25—as the main-spring of his educational system. He will teach his young spaniels to “seek dead”—30, 31, 39—where directed by signs of the hand. He will instruct them in “fetching”—92, 94. &c.—with the view to some of them hereafter retrieving. He will accustom them to hunt hedge-rows, and light open copses—because always under his eye—before taking them into closer cover. Nor until they are under some command, and well weaned from noticing vermin and small birds, will he allow them to enter gorse or strong thickets, and then he will never neglect—though probably he will have used them before—to attach bells of *different sounds* to the collars of his several pupils—one to each—so that his ear may at all times detect any truant straying beyond bounds, and thus enable him to rate the delinquent by name. In this manner he establishes the useful feeling elsewhere spoken of—262—that whether he be within or out of sight he is equally aware of every impropriety that is committed.

60. Young spaniels, when they have been steadily broken in not to hunt too far ahead on the instructor's side of the hedge, may be permitted to beat on the other—and this when only one person is shooting is generally their most useful position, for they are thus more likely to drive the game towards the gun.

61. If a keeper is hunting the team, while you and a friend are beating narrow belts or strips of wood, should you and he be placed, as is usual, on the outside, a little

ahead of the keeper—one to his right, the other to his left—you would much aid him in preventing the young spaniels from ranging wildly were you to turn your face towards him whenever you saw any of them getting too far in advance, for they will watch the guns as much as they will him.

62. Among spaniels the great advantage of age and experience is more apparent than in partridge-dogs. A young spaniel cannot keep to a pheasant's tail like an old one. He may push the bird for forty or fifty yards if judiciously managed. After that he is almost sure from impatience either to lose it, or rush in and flush out of shot, whereas an old cocker, who has had much game shot over him, is frequently knowing enough to slacken his pace, instead of increasing it, when he first touches on birds, apparently quite sensible that he ought to give the gun time to approach before he presses to a flush.

63. Even good spaniels, however well bred, if they have not had great experience, generally road too fast. Undeniably they are difficult animals to educate, and it requires much watchfulness, perseverance, and attention at an early age, so to break in a team of young ones that they shall keep within gun range without your being compelled to halloo or whistle to them. But some few are yet more highly trained.

64. Mr. N——n, when in France, had a lively, intelligent, liver and white cocker which would work busily all day long within gun-shot; and which possessed the

singular accomplishment of steadily pointing all game that lay well, and of not rushing in until the sportsman had come close to him. But this is a case of high breaking more curious than useful, for spaniels are essentially *springers*, not *pointers*, and the little animal must frequently have been lost sight of in cover. Our grandfathers used to apply the term springers solely to large spaniels—never to the Duke of Marlborough's small breed, which was greatly prized.

65. A dog is generally most attached to that description of sport, and soonest recognises the scent of that game, to which he has principally been accustomed in youth. He will through life hunt most diligently where he first had the delight of often finding. The utility therefore is obvious of introducing spaniels at an early age to close covers and hedge-rows, and setters and pointers to heather and stubble.

66. In spaniels, feathered sterns and long ears are much admired, but obviously the latter must suffer in thick underwood. The chief requisite in all kinds of spaniels, is, that they be good finders, and have noses so true that they will never overrun a scent. Should they do so when footing an old cock* pheasant, the chances

* The only bird which we have in America, at all analogous in habit to the pheasant, though totally different in species and appearance, is the Ruffed Grouse, erroneously called Pheasant in the South, and Partridge in the Eastern States. It is, however, for cock and quail shooting in covert, that the Spaniel would be of such inestimable service to sportsmen in North America.—H. W. H.

are that he will double back on the exact line by which he came. They should be high-mettled,—as regardless of the severest weather as of the most punishing cover, and ever ready to spring into the closest thicket the moment a pointed finger gives the command.

67. A comprehension of the signal made by the finger—which is far neater than the raising of the hand described in 30, but not so quickly understood—might with advantage be imparted to all dogs trained for the gun, in order to make them hunt close *exactly* where directed. It is usually taught by pointing with the fore-finger of the right hand to pieces of biscuit, previously concealed, near easily recognised tufts of grass, weeds, &c. It is beautiful to see how correctly, promptly, yet quietly, some spaniels will work in every direction thus indicated.

68. Breasting a strong cover with cockers, is more suited to young, than to old men. The gun must follow rapidly, and stick close when a dog is on the road of feather. A shot will then infallibly be obtained, if a good dog be at work; for the more closely a bird is pressed, the hotter gets the scent. If a pheasant found in thick cover on marshy ground near water—a locality they much like in hot weather—is not closely pushed, he will so twist, and turn, and double upon old tracks that none but the most experienced dogs will be able to stick to him.

69. The preceding observations respecting spaniels apply to all descriptions employed on land-service,

whether of the strong kind, the Sussex breed and the Clumber, or the smallest cockers, Blenheims and King Charles'. But whether they are to be trained not to hunt flick*—the most difficult part of their tuition, and in which there is generally most failure,—and whether they shall be bred to give tongue, or run mute, will depend much upon the nature of the country to be hunted, and yet more upon the taste of the proprietor. No fixed rules can be given for a sport that varies so much as cover-shooting.

70. Of the large kind, most sportsmen will think a couple and a half a sufficient number to hunt at a time. Certainly one of them should retrieve: and they ought to be well broken in not to notice flick. These dogs are most esteemed when they run mute. If they do, they must be hunted with bells in very thick cover; but the less bells are employed the better, for the tinkling sound, in a greater or smaller degree, annoys all game. Such dogs, when good, are very valuable.

71. I once shot over a team of Clumber spaniels belonging to Mr. D——z.† The breed—the Duke of Newcastle's, taking their name from one of his seats—are

* For the benefit of those who have the good fortune, or the bad fortune, as the case may be, of always living within the sound of Bow bells, "Flick," be it observed, is a synonym for "Fur," thereby meaning Hare or Rabbit.

† Contrary to my usual system, I preserve these anecdotes, as relating to the Clumber Spaniels, which are so little known, and which I so much desire to see introduced in America.—H. W. H.

mostly white with a little lemon color, have large, sensible heads, thick, short legs, silky coats, carry their sterns low, and hunt perfectly mute. The team kept within twenty or twenty-five yards of the keeper, were trained to acknowledge rabbits, as well as all kinds of game; and in the country Mr. D——z was then shooting over afforded capital sport. One of the spaniels was taught to retrieve. He would follow to any distance, and seldom failed to bring. A regular retriever was, however, generally taken out with them. Mr. D——z told me that they required very judicious management, and encouragement rather than severity, as undue whipping soon made them timid. They are of a delicate constitution. He rather surprised me by saying that his spaniels from working quietly and ranging close,—therefore, alarming the birds less,—procured him far more shots in turnips than his pointers; and he had three that looked of the right sort. He explained matters, however, by telling me that it was his practice to make a circuit round the outskirts of a turnip or a potato field before hunting the inner parts. This of course greatly tended to prevent the birds breaking. A juvenile sportsman would rejoice in the services of the spaniels, for many a rabbit would they procure for him without the aid of powder and shot.

72. When Colonel M——, who died in Syria, was stationed with his troop of Horse Artillery at Pontefract, he was asked to shoot partridges at Lord P——n's seat in Yorkshire. On meeting the gamekeeper, according

to appointment, he found him surrounded by a team of Clumber spaniels. Colonel M——, in some surprise at seeing no setters or pointers, remarked that he had expected some *partridge* shooting. "I know it," answered the man, "and I hope to show you some sport." To the inquiry why one of the spaniels was muzzled, the keeper said that his master had threatened to shoot it should it again give tongue, and, as it possessed a particularly fine nose, he—the keeper—was anxious not to lose it. They walked on, and soon the man told M—— to be prepared, as the spaniels were feathering. A covey rose. The Colonel, who was a good shot, killed right and left. All the spaniels dropped instantly. When he was reloading the keeper begged him to say which of the dogs should retrieve the game. M—— pointed to a broad-headed dog lying in the middle, when the keeper directed by name the spaniel so favored to be off. It quickly fetched one of the birds. The keeper then asked M—— to choose some other dog to bring the remaining bird—a runner. He did so, and the animal he selected to act as retriever performed the duty very cleverly; the rest of the team remaining quite still, until its return.

The Colonel had capital sport, killing nearly twenty brace, and the dogs behaved beautifully throughout the day. When afterwards relating the circumstances, he observed that, although an old sportsman, he had seldom been so gratified, as it was a novel scene to him, who had not been accustomed to shoot over spaniels.

73. Of small cockers, three couple appear ample to form a team. Some teams of small springers greatly exceed this number, and many sportsmen shoot over more than a couple and a half of the larger spaniels; but it is a question whether, in the generality of cases, the gun would not benefit by the number being diminished rather than increased. The smaller in number the team, the greater is the necessity that none of them should stick too close to "heel." The difficulty is to make them hunt far enough, and yet not too far. At least one of the number should retrieve well. If they give tongue, it ought to be in an intelligible manner; softly, when they first come on the haunt of a cock, but making the cover ring again with their joyous melody, when once the bird is flushed. A first-rate cocker will never deceive by opening upon an old haunt, nor yet find the gun unprepared by delaying to give due warning before he flushes the bird. When cocks are abundant, some teams are broken, not only to avoid flick, but actually not to notice a pheasant, or anything besides woodcock. Hardly any price would tempt a real lover of cock-shooting, in a cocking country, to part with such a team. Hawker terms the sport, "the fox-hunting of shooting." Some sportsmen kill water-hens to young spaniels to practise them in forcing their way through entangled covers, and get them well in hand and steady against the all-important cocking season.

74. When a regular retriever can be constantly employed with spaniels, of course it will be unnecessary to

make any of them fetch game—certainly never to lift anything which falls out of bounds—though all the team should be taught to “seek dead.” This is the plan pursued by the Duke of Newcastle’s keepers, and obviously it is the soundest and easiest practice, for it must always be more or less difficult to make a spaniel keep within his usual hunting limits, who is occasionally encouraged to pursue wounded game, at his best pace, to a considerable distance.

75. Other teams are broken no more than to keep within range, being allowed to hunt all kinds of game, and also rabbits; they, however, are restricted from pursuing wounded flick further than fifty or sixty yards. Where rabbits are abundant, and outlying, a team thus broken affords lively sport—nothing escapes them.

76. Wild spaniels, though they may show you most cock, will get you fewest shots, unless you have well-placed markers. There are sportsmen who like to take out one steady dog to range close to them, and a couple of wild ones to hunt on the flanks, one on each side, expressly that the latter may put up birds for the markers to take note of.

77. An old sportsman knows *mute* spaniels to be most killing: a young one may prefer those which give tongue—if true from the beginning owning nothing but game,—because, though undeniably greater disturbers of a cover, they are more cheerful and animating. The superiority of the former is, however, apparent on a still

calm day, when the least noise will make the game steal away long before the gun gets within shot. But it is not so in all countries.

78. In very thick covers it is obvious, the height of setters being greatly against them, that spaniels are far preferable: but in light covers, and when the leaves are off the trees, *handy* old setters—if white, all the better—that will readily confine themselves to a restricted range, and will flush their game when ordered—IV. and VII. of 119 and 196—afford quite as much sport, if not more. Setters do not, to the same degree, alarm birds; and there is, also, this advantage, that they can be employed on *all* occasions, excepting in low gorse or the closest thickets, whereas spaniels, from their contracted “beat,” are nearly useless in the open when game is scarce. You will be prepared, when first you hunt a setter in cover, to sacrifice much of your sport. There must be noise; for it is essential to make him at once thoroughly understand the very different “beat” required of him, and this can only be effected by constantly checking and rating him, whenever he ranges beyond the prescribed limits. He should hunt slowly and carefully to the right and left, and never be much in advance of the guns. In a short time he will comprehend matters, if you are so forbearing and judicious as invariably to call him away from every point made the least out of bounds. A less severe test of your consistency will not suffice. The few first days will either make or mar him as a cover-dog. You must naturally expect that hunting him much in

cover will injure his range in the open, and make him too fond of hedge-rows.

79. But there is a man in Yorkshire, who will not willingly admit this.* C——e, Sir George A——e's gamekeeper—and a good one he is, for he has a particularly difficult country to protect, one intersected with "rights of way" in every direction—makes his pointers as freely hunt the cover as the open. You never lose them, for they are sure to make their appearance when they think they have given you ample time to go to them if you choose. This cover work does not the least unsteady them, but it is right to state that C—— is an unusually good breaker, and works his dogs with singular temper and patience. They are very attached to him, and appear to listen anxiously to what he says when he talks to them—which, I own, he does more than I recommend.

80. Pointers, however, are manifestly out of place in strong cover, though an unusually high-couraged one may occasionally be found, who will dash forward in defiance of pricks and scratches; but it is not fair to expect it. In a very light cover I have often shot over one belonging to a relation of mine, which was so clever, that when I came close to her as she was pointing, she

* I leave these two anecdotes, contrary to my usual system, as we use setters and pointers so generally in cover in America, that the idea of their being utterly unfit for cover work seems strange. Yet such is the opinion in England, and where they are chiefly used in the open it *does* operate to spoil their range.—H. W. H.

would frequently run around to the other side of the thicket, and then rush in to drive the game towards me. This killing plan had in no way been taught her; she adopted it solely of her own sagacity. Having been much hunted in cover when young, she was so fond of it (65) as to be, comparatively speaking, quite unserviceable on the stubbles.

WATER SPANIELS (OR WATER RETRIEVERS).

81. A young water spaniel might, with advantage, occasionally be indulged with a duck hunt in warm weather. It would tend to make him quick in the water, and observant. The finishing lessons might conclude with your shooting the bird and obliging him to retrieve it. He should be made handy to your signals—IV. to VII. and X. of 119—so as to hunt the fens and marshes, and “seek dead” exactly where you may wish.

82. This obedience to the hand is particularly required; for when the spaniel is swimming he is on a level with the bird, and therefore is not so likely to see it—especially if there is a ripple on the water—as you, who probably are standing many feet above him on the shore. As you may frequently, while he is retrieving, have occasion to direct his movements when at a considerable distance from him, you probably would find it more advantageous to teach him the forward signal used by shepherds, than the one described in IV. of 119.

83. A water spaniel should also be taught to fetch—86, 87, 91 to 94—be accustomed to follow quietly close to your heels,—be broken in, not to the “down charge”—26—but to the “drop”—22 to 25—the instant you signal to him, while you are noiselessly stalking the wild-fowl previously reconnoitred, with the aid of your Dollond, from some neighboring height; nor should he stir a limb, however long he and you may have to await, ensconced behind a favoring bush, the right moment for the destructive raking discharge of your first barrel, to be followed by the less murderous but still effective flying shot. On hearing the report, it is his duty to dash instantly into the water, and secure the slain as rapidly as possible.

84. A really good water retriever is a scarce and valuable animal. He should be neither white nor black, because the colors are too conspicuous, especially the former—a hint by-the-bye for your own costume;*—

* But when the moors are covered with snow, poachers, who emerge in bands from the mines, often put a shirt over their clothes, and manage to approach grouse at a time when a fair sportsman cannot get a shot; but this is the only occasion on which one uniform color could be advantageous. A mass of *any* single color always catches, and arrests the eye. Nature tells us this; animals that browse, elephants, buffaloes, and large deer, as well as those which can escape from their enemies by speed, are mostly of one color. On the contrary, the tiger kind, snakes, and all that lie in wait for, and seize their prey by stealth, wear a garment of many colors, so do the smaller animals and most birds, which are saved

he should be perfectly mute ; of a patient disposition, though active in the pursuit of birds ; of so hardy a constitution as not to mind the severest cold,—therefore no coddling while he is young near a fire,—and possess what many are deficient in, viz. a good nose : consequently a cross that will improve his nose, yet not decrease his steadiness, is the great desideratum in breeding. He should swim rapidly, for wild fowl that are only winged, will frequently escape from the quickest dog if they have plenty of sea-room and deep water—see also 96, 302.

85. In the wild-rice lakes, as they are commonly called, of America, a brace of highly-trained spaniels will sometimes, on a windy day, afford you magnificent sport. The cover is so good that, if it is not often beaten, the birds will frequently get up singly, or only a couple at a time. The dogs should keep swimming about within gun shot, while you are slowly and silently paddling, or probably poling your canoe through the most likely spots. Relays of spaniels are requisite, for it is fatiguing work. If, by any rare chance, you are situated where you can get much of this delightful shooting, and *you are an enthusiast in training*, it may be worth your while to consider whether there would not be an advantage in making the dogs perfect in the “down charge,” as they would then cease swimming from capture by the inability of their foes to distinguish them from the surrounding foliage or herbage. The uniform of our rifle corps is too much of one hue.

the instant you fired. But this long digression about spaniels has led us away from your pup, which we assumed—3—to be a pointer, or setter.

CHAPTER IV.

LESSONS IN "FETCHING."—RETRIEVERS.

86. Though you may not wish your young pointer (or setter) to perform the duties of a regular retriever (292), still you would do well to teach him, whilst he is a puppy, to fetch and deliver into your hand anything soft you may occasionally throw for him, or leave behind you in some place where he will have observed you deposit it, while he is following at your heels. In a little time you can drop something *without* letting him see you, and afterwards send him back for it. A dog thus made, who is your intimate companion, becomes so conversant with every article of your apparel, and with whatever you usually carry about you, that, should you accidentally drop anything, the observant animal will be almost certain to recover it. On receiving your order to "be off and find" he will accurately retrace your footsteps for miles and miles, diligently hunting every yard of the ground. Of course the distances to which you at first

send your dog will be inconsiderable, and you should carefully avoid persevering too long a time, lest he get sick of the lesson. Indeed, in all his lessons—as well in-doors as out—but particularly in this, let it be your aim to leave off at a moment when he has performed entirely to your satisfaction ; that you may part the best of friends, and that the last impression made by the lesson may be pleasing as well as correct, from a grateful recollection of the caresses which he has received. In wild-duck shooting you may be in situations where you would be very glad if the dog would bring your bird ; and when it is an active runner in cover, I fear you will be more anxious than I could wish—221—that the dog should "fetch." It is probable that he will thus assist you if he be practised as I have just advised ; and such instruction may lead, years hence, to his occasionally bringing you some dead bird which he may come across, and which you otherwise might have imagined you had missed, for its scent might be too cold, and consequently too changed, for the dog to have thought of regularly pointing it.

87. Mark my having said, "deliver into your hand," that your young dog may not be satisfied with only dropping, within your sight, any bird he may lift, and so, perhaps, leave it on the other side of a trout stream, as I have seen dogs do more than once, in spite of every persuasion and entreaty. With a young dog, who retrieves, never pick up a bird yourself, however close it may fall to you. Invariably, make him either deliver

it into your hand or lay it at your feet. The former is by far the better plan. If the dog has at one moment to drop the bird at your will, he is likely to fancy himself privileged to drop it at another time for his own convenience. In other respects, too, the former is the safest method. I have a bitch now in my recollection, who frequently lost her master slightly winged birds—which she had admirably recovered—by dropping them too soon on hearing the report of a gun, or coming on other game—for off they ran, and fairly escaped, it being impracticable, by any encouragement, to induce her to seek for a bird she had once lifted.

88. I observed it was something soft which you should teach your dog to fetch. Probably you have seen a retriever taught to seek and bring a stone, upon which, in a delicate manner, the tutor has spit. Does it not stand to reason that the stone must have tended to give his pupil a hard mouth? And what may, later in life, cause him much misery, in dashing at a bounding stone, he may split a tooth. Dogs of an advanced age suffer more in their mouths than most of us suspect.

89. Should your pup be unwilling to enter water, on no account push him in, under the mistaken idea that it will reconcile him to the element—it will but augment his fears. Rather, on a warm day, throw some biscuit for him, when he is hungry, close to the edge of the bank, where it is so shallow as merely to require his wading. Chuck the next piece a little further off, and, by degrees, increase the distance until he gets beyond

his depth, and finds that nature has given him useful swimming powers. On no occasion will the example of another dog more assist you. Your youngster's diving can never be of service; therefore throw in only what will float. Otherwise he might have a plunge for nothing, and so be discouraged; and evidently it should be your constant aim to avoid doing anything likely to shake his confidence in you.

90. If you ever have occasion to teach a dog to dive and retrieve, first accustom him, on land, to fetch something heavy, of a conspicuous color. When he brings it eagerly, commence your diving lesson by throwing it into the shallowest parts of the stream. Only by slow degrees get to deep water, and let your lessons be very short. Never chuck in a stone. The chances are twenty to one that there are several at the bottom not very dissimilar, and the young dog ought not to be subjected to the temptation of picking up one of them in lieu of that he was sent for. Should he on any occasion do so, neither scold nor caress him; quietly take what he brings, lay it at your feet, to show him that you want it not, and endeavor to make him renew his search for what you threw in; do this by signs, and by encouragement with your voice, rather than by chucking stones in the right direction, lest he should seek for them instead of searching for what you originally sent him.

91. Some teachers make a young dog fetch a round pin cushion, or a cork ball, in which needles are judi-

ciously buried ; nor is it a bad plan, and there need be no cruelty in it, if well managed. At least it can only be cruel once, for the dog's recollection of his sufferings will prevent his picking up the offending object a second time. Others, after he is well drilled into "fetching," and takes pleasure in it, will make him bring a bunch of keys. There are few things a dog is less willing to lift. Most probably they gave him some severe rebuffs when first heedlessly snatching at them ; and the caution thereby induced tends to give him a careful, tender mouth. A fencing master, I knew in France, had a spaniel, singularly enough for a Frenchman, called "Waterloo," that would take up the smallest needle.

92. When your dog has picked up what you desired, endeavor to make him run to you quickly. Many who teach a dog to fetch, praise and encourage him while he is bringing what he was sent after. Clearly this is an error. It induces the dog to loiter and play with it. He thinks he is lauded for having it in his mouth and carrying it about. Reserve your encomiums and caresses until he has delivered it. If you walk away, the fear of your leaving him will induce him to hurry after you. Let a dog retrieve ever so carelessly, still, while on the move, he will rarely drop a bird.

93. Dogs that retrieve should be gradually brought to lift heavy, flexible things, and such as require a large grasp, that they may not be quite unprepared for the weight and size of a hare ; otherwise they may be in

clined to drag it along by a slight hold of the skin, instead of balancing it across their mouths. Thus capacious jaws are obviously an advantage in retrievers. The French gamekeepers, many of whom are capital hands at making a retriever—excepting that they do not teach the "down charge,"—stuff a hare or rabbit skin with straw, and when the dog has learned to fetch it with eagerness, they progressively increase its weight by burying larger and larger pieces of wood in the middle of the straw: and to add to the difficulty of carrying it, they often throw it to the other side of a hedge or thick copse. If the dog shows any tendency to a hard mouth they mix thorns with the straw.

94. I ought to have mentioned sooner that you should commence teaching a puppy to "fetch" by shaking your glove—or anything soft—at him, and encouraging him to seize and drag it from you. Then throw it a yard or two off, gradually increasing the distance, and the moment he delivers it to you, give him something palatable. Should you, contrary to every reasonable expectation, from his having no inclination to romp or play with the glove, not be able to persuade him to pick it up, put it between his teeth—force him to grasp it by tightly pressing his jaws together, speaking all the while impressively to him—scold him if he is obstinate and refuses to take hold of the glove. After a little time retire a few paces, keeping one hand under his mouth—to prevent his dropping the glove,—while you lead or drag him with the other. When you halt, be

sure not to take the glove immediately from him—oblige him to continue holding it for at least a minute—lest he should learn to relinquish his grip too soon,—before you make him yield at the command “give;” then bestow a reward. Should he drop it before he is ordered to deliver it, replace it in his mouth and again retreat some steps before ordering him to “give.” He will soon follow with it at your heels. If you have sufficient perseverance you can thus make him earn all his daily food. Hunger will soon perfect him in the lesson. Observe that there are four distinct stages in this trick of carrying—the first, making the dog grasp and retain—the second, inducing him to bring, following at your heels—the third, teaching him not to quit his hold when you stop—the fourth, getting him to deliver into your hands on your order. The great advantage of a sporting dog’s acquiring this trick is that it accustoms him to deliver into your *hands*; and it often happens that you must thus teach a dog to “carry” as a preparative to teaching him to “fetch.” It certainly will be judicious in you to do so, if the dog is a lively, riotous animal; for the act of carrying the glove—or stick, &c.—quietly at your heels will sober him, and make him less likely to run off with it instead of delivering it when you are teaching him to fetch. As soon as he brings the glove tolerably well, try him with a short stick. You will wish him not to seize the end of it, lest he should learn to “drag” instead of “carry.” Therefore fix pegs or wires into holes drilled at right angles to each other

at the extremities of the stick. He will then only grasp it near the middle.

95. This drill should be further extended if a

REGULAR LAND RETRIEVER

be your pupil. Throw dead birds of any kind for him to bring—of course one at a time,—being on the alert to check him whenever he grips them too severely. If he persists in disfiguring them, pass a few blunted knitting needles through them at right angles to one another. When he fetches with a tender mouth, you will be able to follow up this method of training still further by letting him "road"—or "foot," as it is often termed—a rabbit in high stubble, one—or both, if a strong buck—of whose hind legs you will have previously bandaged in the manner described in 56. Be careful not to let him see you turn it out, lest he watch your proceedings and endeavor to "hunt by eye." Indeed it might be better to employ another person to turn it out. Keep clear of woods for some time—the cross scents would puzzle him. If by any chance you have a winged pheasant or partridge, let him retrieve it. You will not, I presume, at the commencement select a morning when there is a dry cold wind from the north-east, but probably you will wish to conclude his initiatory lessons on days which you judge to possess least scent. The more he has been practised as described in 39, the better will he work ; for he cannot keep his nose too persever-

ingly close to the ground. With reference to the instructions in that paragraph, I will here remark, that before you let the dog stoop to hunt, you should have placed him by signal (31) near the spot from which you had begun dragging the bread. In paragraph 190 an instance is given of the manner in which a dog who retrieves should be put upon a scent; and why that mode is adopted is explained in 184.

96. It is quite astonishing how well an old dog that retrieves knows when a bird is struck. He instantly detects any hesitation or uncertainty of movement, and for a length of time will watch its flight with the utmost eagerness, and, steadily keeping his eye on it, will as surely as yourself mark its fall. To induce a young dog to become thus observant, always let him perceive that *you* watch a wounded bird with great eagerness; his imitative instinct will soon lead him to do the same. This faculty of observation is particularly serviceable in a water retriever. It enables him to swim direct to the crippled bird, and, besides the saving of time, the less he is in the water in severe weather, the less likely is he to suffer from rheumatism.

97. As an initiatory lesson in making him observant of the flight and fall of birds, place a few pigeons, or other birds, during his absence, each in a hole covered with a tile. Afterwards come upon these spots apparently unexpectedly, and, kicking away the tiles—or, what is better, dragging them off by a previously adjusted string,—shoot the birds for him to bring; it

being clearly understood that he has been previously tutored into having no dread of the gun. As he will have been taught to search where bidden—IV. to VIII. of 119,—nothing now remains but to take him out on a regular campaign, when the fascinating scent of game will infallibly make him search—I do not say deliver—with great eagerness. When once he then touches upon a scent, leave him entirely to himself—not a word, not a sign. Possibly his nose may not be able to follow the bird, but it is certain that yours cannot. Occasionally you may be able to help an old retriever (296), but rarely, if ever, a young one. Your interference, nay, probably your mere presence, would so excite him as to make him overrun the scent. Remain, therefore, quietly where you are until he rejoins you.

98. When we see a winged pheasant racing off, most of us are too apt to assist a young dog, forgetting that we thereby teach him, instead of devoting his whole attention to work out the scent, to turn to us for aid on occasions when it may be impossible to give it. When a dog is hunting *for* birds, he should frequently look to the gun for signals, but when he is *on* them he should trust to nothing but his own scenting faculties.

99. If, from a judicious education, a retriever pup has had a delight in "fetching" rapidly, it is not likely he will loiter on the way to mouth his birds; but the fatigue of carrying a hare a considerable distance may, perhaps, induce a young dog to drop it in order to take a moment's rest. There is a risk that when doing so he

may be tempted to lick the blood, and, finding it palatable, be led to maul the carcase. You see, therefore, the judiciousness of employing every means in your power to ensure his feeling anxious to deliver *quickly*, and I know not what plan will answer better—though it sounds sadly unsentimental—than to have some pieces of hard boiled liver* at hand to bestow upon him the moment he surrenders his game, until he is thoroughly confirmed in an expeditious delivery. Never give him a piece, however diligently he may have searched, unless he succeeds in bringing. When you leave off these rewards do so gradually. The invariable bestowal of such dainties during, at least, the retriever's first season, will prevent his ever dropping a bird on hearing the report of a gun—as many do—in order to search for the later killed game.

100. Should a young retriever evince any wish to assist the cook by plucking out the feathers of a bird; or from natural vice or mismanagement before he came into your possession,† show any predisposition to taste blood, take about two feet (dependent upon the size of the dog's head) of iron wire, say the one-eighth of an inch in

* A drier and cleaner article than you may suppose, and which can be carried not inconveniently in a Mackintosh, or oil-skin bag—a toilet sponge bag.

† If a retriever has the opportunity, while prowling about, of gnawing hare or rabbit-skins thrown aside by a slovenly cook, it will not be unnatural in him, when he is hungry, to wish to appropriate to himself the hide, if not the interior, of the animals he is lifting.

diameter, sufficiently flexible for *you*, but not for *him* to bend. Shape this much into the form of the letter U, supposing the extremities to be joined by a straight line. Place the straight part in the dog's mouth, and passing the other over his head and ears, retain it in position by a light throat lash passed through a turn in the wire, as here roughly represented. The flexibility of the wire will enable you to adjust it with ease to the shape of his head.



When in the kennel he ought to be occasionally thus bitted, that he may not fret when he is first hunted with it. It will not injure his teeth or much annoy him if it lie on his grinders a little behind the tushes.

101. Sometimes a retriever, notwithstanding every encouragement, will not pursue a winged bird with sufficient rapidity. In this case associate him for a few days with a quicker dog, whose example will to a certainty animate him and increase his pace. It is true that when he is striving to hit off a scent he cannot work too patiently and perseveringly; but, on the other hand, the moment he is satisfied he is on it, he cannot follow too rapidly. A winged bird, when closely pressed, seems, through nervousness, to emit an increasing stream of scent; therefore, though it may sound paradoxical, the retriever's accelerated pace then makes him (his nose being close to the ground) the less likely to overrun it; and the faster he pursues the less ground must he disturb, for the shorter will be the chase.

102. Retrievers are generally taught to rush in the

instant a bird falls. This plan, like most other things, has its advocates and its opponents. I confess to being one of the latter, for I cannot believe that in the long run it is the best way to fill the bag. I think it certain that more game is lost by birds being flushed while the guns are unloaded, than could be lost from the scent cooling during the short period the dog remains at the "down charge." Unquestionably some retrievers have so good a nose, that the delay would not lead to their missing any wounded game however slightly struck; and the delay has this great advantage, that it helps to keep the retriever under proper subjection, and diminishes his anxiety to rush to every part of the line where a gun may be fired, instead of remaining quietly at his master's heels until signalled to take up the scent. Moreover, a retriever by neglecting the "down charge," sets an example to the pointers or setters who may be his companions, which it is always more or less difficult to prevent the dogs, if young, from following. But I once shot over a retriever which I could hardly wish not to have "run on shot." On a bird being hit he started off with the greatest impetuosity, kept his eye immovably fixed on its flight, and possessed such speed that a winged bird scarcely touched the ground ere it was pinned. He would, too, often seize a slightly injured hare before it had acquired its best pace. The pursuit so soon terminated that possibly less game escaped being fired at than if the retriever had not stirred until the guns were reloaded. On a miss he was never allowed—indeed ap-

peared little inclined—to quit "heel." Of course a trainer's trouble is decreased by not breaking to the "down charge," which may induce some to recommend the plan; though it is to be observed, that this class of dogs is more easily than any other perfected in it, because the breaker nearly always possesses the power of treading upon or seizing the checkcord the instant a bird is sprung.

103. The nature of your shooting will much influence you in deciding which of the two methods to adopt; but should you select the one which the generality of good sportsmen consider to be most according to rule, and to possess the greatest beauty, viz., the "down charge," rather lose any bird, however valuable, so long as your retriever remains young, than put him on the "foot" a second before you have reloaded. Undoubtedly it ought to be taught to every dog broken for sale, as the purchaser can always dispense with it should he judge it unnecessary—it can soon be untaught. It is clear that not "quitting heel" until ordered is tantamount to the regular "down charge," but I think the last is the easiest to enforce constantly. It is the more decided step.

104. Large retrievers are less apt to mouth their game than small ones: but very heavy dogs are not desirable, for they soon tire. And yet a certain medium is necessary, for they ought to have sufficient strength to carry a hare with ease through a thicket, when balanced in their jaws, and be able to jump a fence with her. They should run mute. And they should be thick coated: unless they are so,—I do not say long

coated,—they cannot be expected to dash into close cover, or plunge into water after a duck or snipe when the thermometer is near zero.

105. It is usually allowed that, as a general rule, the best land retrievers are bred from a cross between the setter and the Newfoundland—or the strong spaniel and Newfoundland. I do not mean the heavy Labrador, whose weight and bulk is valued because it adds to his power of draught, nor the Newfoundland, increased in size at Halifax and St. John's to suit the taste of the English purchaser,—but the far slighter dog reared by the settlers on the coast,—a dog that is quite as fond of water as of land, and which in almost the severest part of a North American winter will remain on the edge of a rock for hours together, watching intently for anything the passing waves may carry near him. Such a dog is highly prized. Without his aid the farmer would secure but few of the many wild ducks he shoots at certain seasons of the year. The patience with which he waits for a shot on the top of a high cliff—until the numerous flock sail leisurely underneath—would be fruitless, did not his noble dog fearlessly plunge in from the greatest height, and successfully bring the slain to shore.

106. Probably a cross from the heavy, large headed setter, who, though so wanting in pace, has an exquisite nose; and the true Newfoundland, makes the best retriever. Nose is the first desideratum. A breaker may doubt which of his pointers or setters possesses the

greatest olfactory powers, but a short trial tells him which of his retrievers has the finest nose.

107. Making a first-rate retriever is a work of time, but his being *thoroughly* grounded in the required initiatory lessons facilitates matters surprisingly. Indeed after having been taught the "drop"—22, 24, 25,—to "fetch"—92 to 94—and "seek dead" in the precise direction he is ordered—XI of 119,—almost any kind of dog can be made to retrieve. The better his nose is, the better of course he will retrieve. Sagacity, good temper, quickness of comprehension, a teachable disposition, and all cultivated qualities are almost as visibly transmitted to offspring as shape and action; therefore the stronger a dog's hereditary instincts lead him to retrieve, the less will be the instructor's trouble; and the more obedient he is made to the signals of the hand, the more readily will he be put upon a scent. Dogs that are by nature quick rangers do not take instinctively to retrieving. They have not naturally sufficient patience to work out a feeble scent. They are apt to overrun it. A really good retriever will pursue a wounded bird or hare as accurately as a bloodhound will a deer or man; and if he is put on a false scent, I mean a scent of uninjured flick or feather, he will not follow it beyond a few steps—experience will have shown him the inutility of so doing. (297.)

108. Avail yourself of the first opportunity to make a young retriever lift a woodcock, lest in after life, from novel scent, he decline touching it, as many dogs have

done to the great annoyance of their masters. Ditto, with the delicate landrail.

109. The directions given about "fetching" led me to talk of retrievers; and, having touched upon the subject, I thought it right not to quit it, until I had offered the best advice in my power. I have but one more recommendation to add before I return to your setter—or pointer—pup: carefully guard a young retriever—indeed any dog bred for the gun—from being ever allowed to join a rat-hunt. Rat-hunting would tend to destroy his tenderness of mouth, nay, possibly make him mangle his game. But this is not all. It has often gradually led good dogs to decline lifting hares or rabbits, apparently regarding them more in the light of vermin than of game. Some dogs, however, that are not bad retrievers, are capital ratters, but they are exceptions to the general rule. Indeed, you should never permit your dog to retrieve any kind of ground or winged vermin. If the creature were only wounded it might turn upon him. He in self-defence would give it a grip, and he might thus be led to follow the practice on less pardonable occasions. Remember, that a winged bittern or heron might peck out his eye.

CHAPTER V.

INITIATORY LESSONS OUT OF DOORS.—TRICKS.

110. As I before observed, you can practise most of the initiatory lessons in your country walks. Always put something alluring in your pocket to reward your pupil for prompt obedience. Do not take him out unnecessarily in bad weather. On no account let him amuse himself by scraping acquaintance with every idle cur he meets on the way; nor permit him to gambol about the lanes. Let him understand by your manner that there is business at hand. Never let him enter a field before you. *Always keep him at your heels, until you give him the order to be off.* You will find him disposed to presume and encroach. According to the old adage, "Give him an inch, and he will take an ell." He will be endeavoring to lead rather than to follow, and, if he fancies himself unobserved, he will most perseveringly steal inch upon inch in advance. Be ever on the watch, ready to check the *beginning* of every act of disobedience. Implicit obedience in trifles will insure it in things of more importance.

111. For some time, but the period is uncertain—say from his being eight months old until double that age*—

* I once had a pointer pup whose dam was broken in (after a fashion) and regularly shot to when seven months old. Without

he will merely gallop and frisk about, and probably will take diligently to persecuting butterflies. Let him choose what he likes. Don't think he will prize small beer, when he can get champagne. He will leave off noticing inferior articles as he becomes conversant with the taste of game. It is now your main object to get him to hunt; no matter what, so that he is not perpetually running to "heel." And the more timid he is the more you must let him chase, and amuse himself as his fancy dictates. When you see that he is really occupying himself with more serious hunting, *eagerly* searching for small birds, especially larks, you must begin instructing him how to quarter his ground to the greatest advantage, *under your constant direction*. Should any one join you, or anything occur likely to prevent your giving him your strictest attention, on no account permit him to range—keep him to "heel" until you are quite prepared to watch and control all his movements. Hunt him where he is least likely to find game, for he will take to quartering his ground far more regularly, under your guidance, where his attention is least distracted by any scent. The taint of partridge would be almost sure to make him deviate from the true line on which you are anxious he should work. Labor now diligently, if possible daily, though not for many hours

injury to her constitution, she could not have been hunted for more than an hour or two at a time. She ought not to have been taken to the field for *regular* use until fully a year old.

a day ; for be assured a good method of ranging can only be implanted when he is young.

112. Should your pup be so long before taking to hunting that your patience becomes exhausted, let an older dog accompany you a few times. When *he* finds birds, gradually bring the young one upon them from leeward, and let him spring them. Encourage him to sniff the ground they have quitted, and allow him to run riot on the haunt. After that enjoyment, the example of the old dog will most likely soon make him range, and employ his nose in seeking a repetition of what has afforded him such unexpected delight. If it does not, and the old dog is steady and good-humored enough to bear the annoyance cheerfully, couple the young one to him. Before this he should have learned to work kindly in couples—44. But I am getting on too fast, and swerving from the track I had marked for myself. By-and-by I will tell you how I think you should instruct your youngster to quarter his ground to the best advantage—127, &c.

113. Common sense shows that you ought not to correct your dog for disobedience, unless you are certain that he knows his fault. Now you will see that the initiatory lessons I recommend must give him that knowledge, for they explain to him the meaning of almost all the signs and words of command you will have to employ when shooting. That knowledge, too, is imparted by a system of rewards, not punishments. Your object is not to break his spirit, but his self-will. With his

obedience you gain his affection. The greatest hardship admissible, in this early stage of his education, is a strong jerk of the checkcord, and a sound rating, given, *when necessary*, in the loudest tone and sternest manner; and it is singular how soon he will discriminate between the reproof term "bad"—to which he will sensitively attach a feeling of shame—and the encouraging word "good"—expressions that will hereafter have a powerful influence over him, especially if he be of a gentle, timid disposition.

114. In educating such a dog—and there are many of the kind, likely to turn out well, if they are judiciously managed, often possessing noses so exquisite—perhaps I ought to say cautious—as nearly to make up for their general want of constitution and powers of endurance—it is satisfactory to think that all these lessons can be inculcated without in the slightest degree depressing his spirit. On the contrary, increasing observation and intelligence will gradually banish his shyness and distrust of his own powers; for he will be sensible that he is becoming more and more capable of comprehending your wishes, and therefore less likely to err and be punished (245).

115. I fear you may imagine that I am attributing too much reasoning power to him. You would not think so if you had broken in two or three dogs. What makes dog-teaching, if not very attractive, at least not laborious, is the fact that the more you impart to a dog, the more readily will he gain further knowledge. After teaching a poodle or a terrier a few tricks, you will be

surprised to see with what increasing facility he will acquire each successive accomplishment. It is this circumstance which, I think, should induce you not to regard as chimerical the perfection of which I purpose to speak by-and-by, under the head of "refinements in breaking." Indeed I only adopt this distinction in deference to what I cannot but consider popular prejudice; for I well know many will regard such accomplishments as altogether superfluous. It is sad to think that an art which might easily be made much more perfect, is allowed, almost by universal suffrance, to stop short just at the point where excellence is within grasp.

116. Far more dogs would be *well-broken*, if men would but keep half the number they usually possess. *The owner of many dogs cannot shoot often enough over them to give them great experience.*

117. I am, however, wandering from our immediate subject. Let us return to the lecture, and consider how much knowledge your pupil will have acquired by these preliminary instructions. We shall find that, with the exception of a systematically confirmed range, really little remains to be learned, save what his almost unaided instinct will tell him.

118. For it is wonderful how much you can effect by initiatory instruction: indeed, afterwards, you will have little else to do than teach and confirm your dog in a judicious range—his own sagacity and increasing experience will be his principal guides—for consider how much you will have taught him.

119. He will know—

- I. That he is to pay attention to his whistle—the whistle that you design always to use to him. I mean that, when he hears *one* low blast on his whistle he is to look to you for orders, but not necessarily run towards you, unless he is out of sight, or you continue whistling (18).
- II. That “Toho,” or the right arm raised nearly perpendicularly, means that he is to stand still (19 to 21).
- III. That “Drop,” or the left arm raised nearly perpendicularly, or the report of a gun, means that he is to crouch down with his head close to the ground, between his feet, however far off he may be ranging. Greater relaxation in the position may be permitted after he has been a little time shot over (22 to 26).
- IV. That “On,”—the shortest word for “hie-on,”—or the forward underhand swing of the right hand, signifies that he is to advance in a forward direction—the direction in which you are waving. This signal is very useful. It implies that you want the dog to hunt ahead of you. You employ it also when you are alongside of him at his point, and are desirous of urging him to follow up the running bird or birds, and press to a rise. If he push on too eagerly, you restrain him by slightly raising the right hand—XII. of this paragraph (18 to 21).

- v. That a wave of the right arm and hand—the arm being fully extended and well to the right—from left to right, means that he is to hunt to the right. Some men wave the left hand across the body from left to right, as a direction to the dog to hunt to the right; but that signal is not so apparent at a distance as the one I have described (32).
- vi. That a wave of the left arm from right to left—the arm being fully extended and well to the left—means that he is to hunt to the left (33).
- vii. That the “Beckon,” the wave of the right hand towards you, indicates that he is to hunt towards you (33. See also 67).
- viii. That the word “Heel,” or a wave of the right hand to the rear—the reverse of the underhand cricket-bowler’s swing,—implies that he is to give up hunting, and go directly close to your heels (40).
- ix. That “Fence” means that he is not to leave the place where you are. After being so checked a few times when he is endeavoring to quit the field, he will understand the word to be an order not to “break fence” (42, 43).
- x. That “Find” or “Seek” means that he is to search for something which he will have great gratification in discovering. When he is in the field he will quickly understand this to be game (30, 31).
- xi. That “Dead”—which it would be well to accom-

pany with the signal to "Heel," means that there is something not far off, which he would have great satisfaction in finding. On hearing it, he will come to you, and await your signals instructing him in what direction he is to hunt for it. When, by signals, you have put him as near as you can upon the spot where you think the bird has fallen, you will say "Find;" for, until you say that word, he ought to be more occupied in attending to your signals than in searching for the bird. When you have shot a good many birds to him, if he is within sight, in order to work more silently, omit saying "Dead," only signal to him to go to "Heel" (18, 30, 31, 40).

- xii. That "Care" means that he is near that for which he is hunting. This word, used with the right hand slightly raised—the signal for the "Toho," only not exhibited nearly so energetically—will soon make him comprehend that game is near him, and that he is therefore to hunt cautiously. You will use it when your young dog is racing too fast among turnips or potatoes (35).
- xiii. That "Up" means that he is to sniff with his nose high in the air for that of which he is in search (37).
- xiv. That "Away"—or "Gone," or "Flown"—is an indication that the thing for which he was hunting and of which he smells the taint, is no longer there. This word is not to be used in the field

until your young dog has gained some experience (41).

xv. That "Ware"—pronounced "War"—is a general order to desist from whatever he may be doing. "No" is perhaps a better word; it can be pronounced more distinctly and energetically. If the command is occasionally accompanied with the cracking of your whip, its meaning will soon be understood (43).

xvi. He will also know the distinction between the chiding term "Bad" and the encouraging word "Good; and, moreover, be sensible, from your look and manner, whether you are pleased or angry with him. Dogs, like children, are physiognomists (36, end of 104).

120. You will perceive that you are advised to use the right hand more than the left. This is only because the left hand is so generally employed in carrying the gun.

121. You will also observe, that when the voice is employed—and this should be done *only* when the dog will not obey your signals—I have recommended you to make use of but *one* word. Why should you say "Come to heel," "Ware breaking fence," "Have a care?" If you speak in sentences, you may at times unconsciously vary the words of the sentence, or the emphasis on any word; and as it is only by the sound that you should expect a dog to be guided, the more defined and distinct in sound the several commands are the better.

122. This consideration leads to the remark that, as, by nearly universal consent, "Toho" is the word employed to tell a dog to point, the old rule is clearly a judicious one, never to call him "Ponto," "Sancho," or by any name ending in "o." Always, too, choose one that can be halloosed in a sharp, loud, high key. You will find the advantage of this whenever you lose your dog, and happen not to have a whistle. Observe, also, if you have several dogs, to let their names be dissimilar in sound.

123. I have suggested your employing the word "Drop" instead of the usual word "Down," because it is less likely to be uttered by any one on whom the dog might jump or fawn; for, on principle, I strongly object to any order being given which is not strictly enforced. It begets in a dog, as much as in the nobler animal who walks on two legs, habits of inattention to words of command, and ultimately makes greater severity necessary. If I felt certain I should never wish to part with a dog I was instructing, I should carry this principle so far as to frame a novel vocabulary, and never use any word I thought he would be likely to hear from others. By the bye, whenever you purchase a dog, it would be advisable to ascertain what words of command and what signals he has been accustomed to.

CHAPTER VI.

FIRST LESSON IN AUTUMN COMMENCED. RANGING.

124. A KEEPER nearly always breaks in his young dogs to "set," if their ages permit it, on favorable days in Spring, when the partridges have paired.* He gets plenty of points, and the birds lie well. But I cannot believe it is the best way to attain great excellence, though the plan has many followers: it does not cultivate the intelligence of his pupils, nor enlarge their ideas by making them sensible of the object for which such pains are taken in hunting them. Moreover, their natural ardor—a feeling that it should be his aim rather to increase than weaken—is more or less damped by having often to stand at game before they can be rewarded for their exertions by having it killed to them,—it prevents, rather than imparts, the zeal and perseverance for which Irish dogs are so remarkable. Particularly ought a

* In ordinary seasons immediately after St. Valentine's Day—before the birds have made their nests. The first of September is the commencement of partridge shooting in England, as the 26th of Oct. and the 1st of Nov. are generally in America for quail.

All the breaking for partridge in this work, is applicable and must be referred to quail in America. Grouse shooting on the moors in England is applicable to our prairie shooting, and pheasant shooting to our ruffed grouse shooting, when that may be had. The reader must, therefore, transfer the months and seasons accordingly.—H. W. H.

breaker, whose pupil is of nervous temperament, or of too gentle a disposition, to consider well that the want of all recompense for finding paired birds must make a timid dog far more likely to become a "blinker," when he is checked for not pointing them, than when he is checked for not pointing birds which his own impetuosity alone deprives him of every chance of rapturously "touseling." The very fact that "the birds lie well" frequently leads to mischief; for, if the instructor be not very watchful, there is a fear that his youngsters may succeed in getting too close to their game before he forces them to come to a staunch point. A keeper, however, has but little choice—and it is not a bad time to teach the back—if his master insists upon shooting over the animals the first day of the season, and expects to find them what some call "perfectly broken in." But I trust some of my readers have nobler ends in view; therefore,

125. I will suppose your youngster to have been well grounded in his initiatory lessons, and that you take him out when the crops are nearly off the ground—by which time there will be few squeakers—on a fine cool day in September,—alas! that it cannot be an August day on the moors,—to show him birds for the first time. As he is assumed to be highly bred, you may start in the confident expectation of killing partridges over him, especially if he is a pointer. Have his nose moist and healthy. Take him out when the birds are on the feed, and of an afternoon in preference to the morning,—unless

from an unusually dry season there be but little scent,—that he may not be attracted by the taint of hares or rabbits. Take him out alone, if he evince any disposition to hunt, which, at the age we will presume him to have attained next season, we must assume that he will do, and with great zeal. Be much guided by his temper and character. Should he possess great courage and dash, you cannot begin too soon to make him point. You should always check a wild dog in racing after pigeons and small birds on their rising; whereas you should encourage a timid dog—one who clings to “heel”—in such a fruitless but exciting chase. The measures to be pursued with such an animal are fully detailed in 111, 112.

126. I may as well caution you against adopting the foolish practice of attempting to cheer on your dog with a constant low whistle, under the mistaken idea that it will animate him to increased zeal in hunting. From perpetually hearing the monotonous sound, it would prove as little of an incentive to exertion as a continued chirrup to a horse; and yet if habituated to it, your dog would greatly miss it whenever hunted by a stranger. Not unregarded, however, would it be by the birds, to whom on a calm day it would act as a very useful warning.

127. Though you have not moors, fortunately we can suppose your fields to be of a good size. Avoid all which have recently been manured. Select those that are large, and in which you are the least likely to

find birds, until his spirits are somewhat sobered, and he begins partly to comprehend your instructions respecting his range. There is no reason why he should not have been taken out a few days before this, *not to show him birds*, but to have commenced teaching him how to traverse his ground. Indeed, if we had supposed him of a sufficient age—111—he might by this time be somewhat advanced towards a systematic beat. It is seeing birds early that is to be deprecated, not his being taught how to range.

128. *Be careful to enter every field at the leeward** side—about the middle,—that he may have the wind to work against. Choose a day when there is a breeze, but not a boisterous one. In a calm the scent is stationary, and can hardly be found unless accidentally. In a gale it is scattered to the four quarters.† You

* “Leeward”—a nautical phrase—here meaning the side towards which the wind blows *from* the field. If you entered elsewhere, the dog while ranging would be tempted, from the natural bearing of his nose towards the wind, to come back upon you, making his first turn inwards instead of outwards.

† But, independently of these obvious reasons, scent is affected by causes into the nature of which none of us can penetrate. There is a contrariety in it that ever has puzzled, and apparently ever will puzzle, the most observant sportsman—whether a lover of the chase or gun,—and therefore, in ignorance of the doubtless immutable, though to us inexplicable, laws by which it is regulated, we are contented to call it “capricious.” Immediately before heavy rain there frequently is none. It is undeniable that moisture will at one time destroy it—at another time bring it. That

want not an undirected ramble, but a judicious traversing beat under your own guidance, 'which shall leave no ground unexplored, and yet have none twice explored.

129. Suppose the form of the field, as is usually the case, to approach a parallelogram or square, and that the wind blows in any direction but diagonally across it. On entering at the leeward side send the dog from you by a wave of your hand or the word "On." You wish him, while you are advancing up the middle of it, to cross you at right angles, say from right to left,—then to run up-wind for a little, parallel to your own direction, and afterwards to recross in front of you from left to right, and so on until the whole field is regularly hunted. To effect this, notwithstanding your previous preparatory lessons, you will have to show him the way,

on certain days—in slight frost, for instance,—setters will recognise it better than pointers, and, on the other hand, that the nose of the latter will prove far superior after a long continuance of dry weather, and this even when the setter has been furnished with abundance of water—which circumstance pleads in favor of hunting pointers and setters together. The argument against it, is the usual inequality of their pace, and, to the eye of some sportsmen, the want of harmony in their appearance. Should not this uncertainty respecting the recognition of scent teach us not to continue hunting a good dog who is frequently making mistakes, but rather to keep him at "heel" for an hour or two? He will consider it a kind of punishment, and be doubly careful when next enlarged. Moreover, he may be slightly feverish from overwork, or he may have come in contact with some impurity,—in either of which cases his nose would be temporarily out of order.

as it were—setting him an example in your own person,—by running a few steps in the direction you wish him to go—say to the right,—cheering him on to take the lead. As he gets near the extremity of his beat, when he does not observe you, he can steal a small advance in the true direction of your own beat, which is directly up the middle of the field meeting the wind. If perceiving your advance he turn towards you, face him—wave your right hand to him, and, while he sees you, run on a few paces in his direction—that is, *parallel* to his true direction. As he approaches the hedge—the one on your right hand, but be careful that he does not get close to it, lest, from often finding game there, he ultimately become a potterer and regular hedge hunter—face towards him, and on catching his eye, wave your left arm. If you cannot succeed in catching his eye, you must give one low whistle—the less you habituate yourself to use the whistle, the less you will alarm the birds—study to do all, as far as is practicable, by signals. You wish your wave of the left arm to make the dog turn to the left—his head to the wind,—and that he should run parallel to the side of the hedge for some yards—say from thirty to forty—before he makes his second turn to the left to cross the field; but you must expect him to turn too directly towards you on your first signal to turn. Should he by any rare chance have made the turn—the first one—correctly, and thus be hunting up-wind, on no account interrupt him by making any signals until he has run up the distance you

wish—the aforesaid thirty or forty yards,—then again catch his eye, and, as before—not now, however, faced towards him and the hedge, but faced towards your true direction,—by a wave of the left arm endeavor to make him turn to the left—across the wind. If, contrary to what you have a right to suppose, he will not turn towards you on your giving a whistle and wave of your hand, stand still, and continue whistling—eventually he will obey. But you must not indulge in the faintest hope that all I have described will be done correctly; be satisfied at first with an approach towards accuracy; you will daily find an improvement, if you persevere steadily. When you see that there is but little chance of his turning the way you want, at once use the signal more consonant to his views, for it should be your constant endeavor to make him fancy that he is always ranging according to the directions of your hands. Be particular in attending to this hint.

130. His past tuition—34—most probably will have accustomed him to watch your eye for directions, therefore it is not likely, even should he have made a wrong turn near the hedge—a turn down-wind instead of up-wind, which would wholly have prevented the required advance parallel to the hedge,—that he will cross in rear of you. Should he, however, do so, retreat a few steps,—or face about, if he is far in the rear,—in order to impress him with the feeling that all his work must be performed under your eye. Animate him with an encouraging word as he passes. When he gets near the edge to the

left, endeavor, by signals—agreeably to the method just explained—129—to make him turn to the—his—right, his head to the wind, and run up alongside of it for thirty to forty yards, if you can manage it, before he begins to recross the field, by making a second turn to the right. If you could get him to do this, he would cross well in advance of you.

131. Though most likely his turn—the first—the turn up-wind—will be too abrupt—too much of an acute angle instead of the required right angle,—and that consequently, in order to get ahead of you, he will have to traverse the field diagonally, yet after a few trials it is probable he will do so rather than not get in front of you. This would be better than the former attempt—not obliging you to face about—express your approval, and the next turn near the hedge may be made with a bolder sweep. Remember your aim is, that no part be unhunted, and that none once commanded by his nose should be again hunted. He ought to cross, say thirty yards in front of you, but *much* will depend upon his nose.

132. Nearly on every occasion of catching his eye, except when he is running up-wind parallel to the hedge, give him some kind of signal. This will more and more confirm him in the habit of looking to you, from time to time, for orders, and thus aid in insuring his constant obedience. After a while, judging by the way in which your face is turned, he will know in what direction you propose advancing, and will guide his own movements

accordingly. Should he, as most probably he will for some time, turn too sharply towards you when getting near the hedge, I mean at too acute an angle, incline or rather face towards him. This, coupled with the natural wish to range unrestrained, will make him hunt longer parallel to the hedge, before he makes his second turn towards you.

133. You may at first strive to correct your dog's turning too abruptly inwards—the first turn—by pushing on in your own person further ahead on your own beat; but when he has acquired if merely the slightest idea of a correct range, be most careful not to get in advance of the ground he is to hunt; your doing so might habituate him to cross the field diagonally—thereby leaving much of the sides of the fields unhunted,—in order to get ahead of you; and, moreover, *you* might spring birds you are anxious *he* should find. Should he, on the other hand, be inclined to work too far upward before making his turn to cross the field, hang back in your own person.

134. Though you may be in an unenclosed country, let him range at first to no more than from seventy to eighty yards on each side of you. You can gradually extend these lateral beats as he becomes conversant with his business—indeed at the commencement rather diminish than increase the distances just named, both for the length of the parallels and the space between them. Do not allow the alluring title “a fine wide ranger” to tempt you to let him out of leading strings. If he be

once permitted to imagine that he has a discretionary power respecting the best places to hunt, and the direction and length of his beats, you will find it extremely difficult to get him again well in hand. On the moors his range must be far greater than on the stubbles, but still the rudiments must be taught on this contracted scale or you will never get him to look to you for orders. Do *you* keep entire control over his beats; let *him* have almost the sole management of his drawing upon birds, provided he does not puzzle, or run riot too long over an old haunt. Give him time, and after a little experience his nose will tell him more surely than your judgment can, whether he is working on the "toe" or "heel" of birds, and whether he diverges from or approaches the strongest and most recent haunt—do not flurry or hurry him, and he will soon acquire that knowledge.

135. As the powers of scent vary greatly in different dogs, the depth of their turns—or parallels—ought to vary also, and it will be hereafter for you to judge what distance between the parallels it is most advantageous for your youngster ultimately to adopt in his general hunting. The deeper its turns are, of course, the more ground you will beat within a specified time. What you have to guard against is the possibility of their being so wide that birds may be passed by unnoticed. I should not like to name the distance within which good *cautious* dogs that carry their heads high will wind game on a favorable day.

136. If you design your pupil, when broken in, to

hunt with a companion, and wish both the dogs, as is usual, to cross you, you will, of course, habituate him to make his sweeps—the space between the parallels—wider than if you had intended him to hunt without any one to share his labors.

137. I need hardly warn you to be careful not to interrupt him whenever he appears to be winding birds. However good his nose may be by nature, it will not gain experience and discrimination unless you give him a certain time to determine for himself whether he has really touched upon a faint scent of birds, and whether they are in his front or rear, or gone away altogether. Like every other faculty, his sense of smell will improve the more it is exercised. But on the other hand, as I observed before, do not let him continue puzzling with his nose close to the ground,—urge him on,—make him increase his pace,—force him to search elsewhere, and he will gradually elevate his head, and, catching the scent of other particles, will follow up these with a nose borne aloft, unless he is a brute not worth a twentieth part of the pains which you think of bestowing upon him; for,

138. Besides the greatly decreased chance of finding them, birds that to a certainty would become uneasy, and make off if pursued by a dog tracking them, will often lie well to one who finds them by the wind. They are then not aware that they are discovered, and the dog, from the information his nose gives him, can approach them either boldly or with great wariness, according as he perceives them to be more or less shy.

139. If, being unable to catch the dog's eye, you are forced to use the whistle frequently, and he continues inattentive to it, notwithstanding his previous tuition, stand still—make him lie down—by the word “drop,” if he will not obey your raised left arm—go up to him—take hold of his collar, and rate him, saying, “Bad, bad,” cracking your whip over him—let the whip be one that will crack loudly, not for present purposes, but that, when occasion requires, he may hear it at a distance—and whistling softly. This will show him—should you beat him, you would confuse his ideas—that he is chidden for not paying attention to the whistle. Indeed, whenever you have occasion to scold or punish him, make it a constant rule, while you rate him, to repeat many times the word of command, or the signal which he has neglected to obey. There is no other way by which you will make him understand you *quickly*. You must expect that your young dog will for some time make sad mistakes in his range;—but be not discouraged. Doubtless there is no one thing,—I was going to say, that there are no dozen things,—in the whole art of dog-breaking, which are so difficult to attain, or which exact so much labor, as a high, well-confirmed, systematic range. Nature will not assist you—you must do it all yourself; but in recompense there is nothing so advantageous when it is at length acquired. It will abundantly repay months of persevering exertion. It constitutes the grand criterion of true excellence. Its attainment makes a dog of inferior nose and action far

superior to one of much greater natural qualifications, who may be tomfooling about, galloping backwards and forwards, sometimes over identically the same ground, quite uselessly exerting his travelling powers; now and then, indeed, arrested by the suspicion of a haunt, which he is not experienced enough, or sufficiently taught, to turn to good account,—and occasionally brought to a stiff point on birds accidentally found right under his nose. It is undeniable, *cæteris paribus*, that the dog who hunts his ground most according to rule must in the end find most game.

CHAPTER VII.

FIRST LESSON IN AUTUMN CONTINUED. CAUTION.

140. If it is your fixed determination to confirm your dog in the truly-killing range described in last Chapter, do not associate him for months in the field with another dog, however highly broken. It would be far better to devote but two hours per diem to your pupil exclusively, than to hunt him the whole day with a companion.

141. Many breakers do exactly the reverse of this. They take out an old steady ranger, with the intention that he shall lead the young dog, and that the latter,

from imitation and habit, shall learn how to quarter his ground. But what he gains by imitation will so little improve his intellects, that, when thrown upon his own resources, he will prove a miserable finder. On a hot, dry day he will not be able to make out a feather, nor on any day to "foot" a delicate scent. I grant that the plan expedites matters, and attains the end which *most* professional trainers seek; but it will not give a dog self-confidence and independence, it will not impart to him an inquiring nose, and make him rely on its sensitiveness to discover game, rather than to his quickness of eye to detect when his friend touches upon a haunt; nor will it instruct him to look from time to time towards the gun for directions. It may teach him a range, but not to hunt where he is ordered; nor will it habituate him to vary the breadth of the parallels on which he works, according as his master may judge it to be a good or bad scenting day.

142. To establish the rare, noble beat I am recommending,—one not hereafter to be deranged by the temptation of a furrow in turnips or potatoes,—you must have the philosophy not to hunt your dog in them until he is accustomed in his range to be guided entirely by the wind and your signals, and is in no way influenced by the nature of the ground. Even then it would be better not to beat narrow strips across which it would be impossible for him to make his regular casts. Avoid, too, for some time, if you can, all small fields—which will only contract his range,—and all fields with trenches

or furrows, for he will but too naturally follow them instead of paying attention to his true beat. Have you never, in low lands, seen a young dog running down a potato or turnip trench, out of which his master, after much labor, had no sooner extracted him than he dropped into the adjacent one? It is the absence of artificial tracks which makes the range of nearly all dogs *well* broken on the moors, so much truer than that of dogs hunted on cultivated lands.

143. Moreover, in turnips, potatoes, clover, and the like thick shelter, birds will generally permit a dog to approach so closely, that if he is much accustomed to hunt such places, he will be sure to acquire the evil habit of pressing too near his game when finding on the stubbles—instead of being startled as it were into an instantaneous stop the moment he first winds game,—and thus raise many a bird out of gun-shot that a *cautious* dog—one who slackens his pace the instant he judges that he is beating a likely spot—would not have alarmed.

144. “A *cautious* dog!” Can there well be a more flattering epithet? * Such a dog can hardly travel too fast † in a tolerably open country, where there is not

* Provided always he be not perpetually pointing, as occasionally will happen—and is the more likely to happen if he has been injudiciously taught as a puppy to set chickens, and has thereby acquired the evil habit of “standing by eye;” which, however, may have made him a first-rate hand at pointing crows.

† With the understanding that the pace does not make him “shut up” before the day is over.

a superabundance of game, *if* he really hunt with an inquiring nose;—but to his master what an all-important “if” is this! It marks the difference between the sagacious, wary, patient, yet diligent animal, whose every sense and every faculty is absorbed in his endeavor to make out birds, not for himself but the gun, and the wild harum-scarum who blunders up three-fourths of the birds he finds. No! not *finds*, but frightens,—for he is not aware of their presence until they are on the wing, and seldom points unless he gets some heedless bird right under his nose, when an ignoramus, in admiration of the beauty of the dog’s sudden attitude, will often forget the mischief which he has done.

145. Though you cannot improve a dog’s nose, you can do what is nearly tantamount to it—you can increase his caution. By watching for the slightest token of his feathering, and then calling out “Toho,” or making the signal, you will gradually teach him to look out for the faintest indication of a scent, and *point the instant he winds it*, instead of heedlessly hunting on until he meets a more exciting effluvia. See 174 to 176, and 228.

146. If from a want of animation in his manner you are not able to judge of the moment when he first winds game, and you thus are not able to call out “Toho” until he gets close to birds, quietly pull him back from his point “dead to leeward” for some paces, and there make him resume his point. Perseverance in this plan will ultimately effect your wishes, unless his nose is radically wrong. A dog’s pointing too near his game more

frequently arises from want of caution—in other words, from want of good instruction—than from a defective nose.

147. Slow dogs readily acquire this caution; but fast dogs cannot be taught it without great labor. You have to show them the necessity of diminishing their pace, that their noses may have fair play. If you have such a pupil to instruct, when you get near birds you have marked down, signal to him to come to “heel”

Whisper to him “Care,” and let him see by your light, slow tread, your anxiety not to alarm the birds. If he has never shown any symptoms of blinking, you may, a few times, thus spring the birds yourself while you keep him close to you. On the next occasion of marking down birds, or coming to a very likely spot, bring him into “heel,” and after an impressive injunction to take “care,” give him two or three very limited casts to the right or left, and let *him* find the birds while you instruct him as described in 228. As there will be no fear of such a dog making false points, take him often to the fields where he has most frequently met birds. The expectation of again coming on them, and the recollection of the lectures he there received, will be likely to make him cautious on entering it. I remember a particular spot in a certain field that early in the season constantly held birds. A young dog I then possessed never approached it afterwards without drawing upon it most carefully, though he had not found there for months. At first I had some difficulty in preventing the “draw” from becoming a “point.”

148. I have elsewhere observed that fast dogs, which give most trouble in breaking, usually turn out best: now if you think for a moment you will see the reason plainly. A young dog does not ultimately become first-rate because he is wild and headstrong, and regardless of orders, but because his speed and disobedience arise from his great energies,—from his fondness for the sport, from his longing to inhale the exhilarating scent and pursue the flying game. It is the possession of these qualities that makes him, in his anxious state of excitement, blind to your signals and deaf to your calls. These obviously are qualities that, *under good management*,* lead to great excellence and superiority,—that make one dog do the work of two. But they are not qualities sought for by an idle or incompetent breaker.

149. These valuable qualities in the fast dog, must, however, be accompanied with a searching nose. It is not enough that a dog be always apparently hunting, that is to say, always on the gallop—his nose should always be hunting. When this is the case, and you may be pretty certain it is if, as he crosses the breeze, his nose has intuitively a bearing to windward, you need not fear that he will travel too fast, or not repay you ultimately for the great extra trouble caused by his high spirits and ardor for the sport.

* The more resolute a dog is, the more pains should be taken, before he is shown game, to perfect him in the instant “drop”—25—however far off he may be ranging.

150. You have been recommended invariably to enter every field by the leeward side. This you can generally accomplish with ease, if you commence your day's beat to leeward. Should circumstances oblige you to enter a field on the windward side, make it a rule, as long as your dog continues a youngster, to call him to "heel," and walk down the field with him until you get to the opposite side—the leeward—then hunt him regularly up to windward.

151. I have read wondrous accounts of dogs, who, without giving themselves the trouble of quartering their ground, would walk straight up to the birds if there were any in the field. It has never been my luck, I do not say to have possessed such marvellous animals, but even to have been favored with a sight of them. I therefore am inclined to think, let your means be what they may, that you would find it better not to advertise for creatures undoubtedly most rare, but to act upon the common belief that, as the scent of birds, more or less, impregnates the air, no dog, let his nose be ever so fine, can, except accidentally, wind game unless he seeks for the taint in the air—and that the dog who regularly crosses the wind must have a better chance of finding it than he who only works up wind—and that down wind he can have little other chance than by "roading."

152. It is heedlessness—the exact opposite of this extreme caution—that makes young dogs so often disregard and overrun a slight scent; and since they are

more inclined to commit this error from the rivalry of companionship, an additional argument is presented in favor of breaking them separately, and giving them their own time, leisurely and methodically, to work out a scent, *provided the nose be carried high*. I am satisfied most of us hurry young dogs too much.

CHAPTER VIII.

FIRST LESSON IN AUTUMN CONTINUED. CUNNING OF AGE.

RANGE OF FROM TWO TO SIX DOGS.

153. Of course you will not let your pupil "break fence," or get out of your sight. Be on the watch to whistle or call out "Fence," the instant you perceive that he is thinking of quitting the field. Do not wait until he is out of sight; check him by anticipating his intentions. Should he, unperceived, or in defiance of your orders, get into a field before you, call him back—by the same opening, if practicable, through which he passed, the more clearly to show him his folly;—and do not proceed further until he has obeyed you. A steady adherence to this rule will soon convince him of the inutility of not exercising more patience, or at least forbearance; then signal to him "away"

in the direction *you* choose, not in the direction *he* chooses. It is essential that you should be the first over every fence. In the scramble, birds, at which you ought to have a shot, are frequently sprung. If he is not obedient to your orders make him "drop," and rate him as described in 139.

154. A dog from his own observation so much feels, —and in a greater or less degree, according to his education,—the necessity of watching in what direction you are walking, that if he is habituated to work under your eye,—I mean, is never allowed to hunt behind you,—by turning your back upon him when he is paying no attention to your signals, you will often be able to bring him away from a spot where he is ranging—perhaps down wind—against your wishes, at a time when you are afraid to whistle, lest you should alarm the birds. Waving your hand backwards and forwards near the ground, and stooping low while walking slowly about, as if in search of something, will often attract the attention of an ill-taught, self-willed dog; and his anxiety to participate in the find, and share the sport which he imagines you expect, will frequently induce him to run up, and hunt alongside of you for any close lying bird.

155. Never be induced to hunt your young dog,—nor indeed any dog,—when he is tired. If you do, you will give him a slovenly carriage and habits, and lessen his zeal for the sport. In order to come in for a sniff, at a time when he is too fatigued to search for it himself, he will crawl after his companion, watching for any indica-

tion of his finding. As they become wearied you will have a difficulty in keeping even old well-broken dogs separate—much more young ones, however independently they may have ranged when fresh. You may also, to a certainty, expect false points; but what is of far more consequence, by frequently overtaking your dog, you will as effectually waste his constitution as you would your horse's by premature work.

156. If he is very young when first entered, two or three hours' work at a time will be sufficient. When he is tired, or rather before he is tired, send him home with the man who brings you a relief. Do not fancy your dog will be getting a rest if he is allowed to follow at your heels for the remainder of the day, coupled to a companion. His fretting at not being allowed to share in the sport he sees, will take nearly as much out of him as if you permitted him to hunt. If you can persuade John always to rub him down, and brush and dry him—nay even to let him enjoy an hour's basking in front of the fire—before he shuts him up in the kennel, you will add years to his existence; and remember that one old experienced dog, whose constitution is uninjured, is worth two young ones.

157. When you hunt a brace of dogs, to speak theoretically, they should traverse a field in opposite directions, but along parallel lines, and the distance between the lines should be regulated by you according as it is a good or a bad scenting day, and according to the excellence of the dogs' noses. Mathematical

accuracy is, of course, never to be attained, but the closer you approach the better.

158. You should attempt it—on entering the field to *leeward*, as before directed—by making one dog go straight ahead of you to the distance which you wish the parallel lines to be apart from each other, before you cast him off—say—to the right; then cast off his companion to the left. If the dogs are nearly equal in pace, the one ahead, so long as he does not fancy he winds game, should continue to work on a parallel more advanced than the other.

159. Should you not like to relinquish, for the sake of this formal precision, the chance of a find in the neglected right-hand corner of the field, cast off one dog to the right and the other to the left, on entering it, and make the one that soonest approaches his hedge take the widest sweep—turn—and so be placed in the *advancea* parallel.

160. With regard to hunting more than a brace—when your difficulties wonderfully multiply—your own judgment must determine in what manner to direct their travelling powers to the greatest advantage. Much will depend upon the different speed of the dogs; the number you choose from whim, or otherwise, to hunt; the kind of country you beat; and the quantity and sort of game you expect to find. It is, however, certain you must wish that each dog be observant of the direction in which your face is turned, in order that he may guide his own movements by yours;—that he from time

to time look towards you to see if you have any commands ; and that he be ever anxious to obey them.

161. Herbert writes as follows, in his work on shooting in the United States : * his words ought to have influence, for manifestly he is a good sportsman ; but I own I cannot quite agree with him as to the *facility* with which a range can be taught : “ It is wonderful how easily dogs which are always shot over by the same man—he being one who knows his business—will learn to cross and re-quarter their ground, turning to the slightest whistle, and following the least gesture of the hand. I have seen old dogs turn their heads to catch their master’s eye, if they thought the whistle too long deferred ; and I lately lost an old Irish setter, which had been stone deaf for his last two seasons, but which I found no more difficulty in turning than any other dog, so accurately did he know when to look for the signal.”

162. To beat your ground *systematically* with three dogs, you should strive to make them cross and recross you each on a different parallel, as just described for two dogs ; but each dog must make a proportionally bolder sweep—turn—or,

163. If you have plenty of space, you can make one dog take a distinct beat to the right, another a separate beat to the left, and direct the third—which ought to be the dog least confirmed in his range—to traverse the central part,—and so be the only one that shall cross and

* Entitled, “ Field Sports in the United States and British Provinces, by Frank Forester.”

recross you. If one of your dogs is a slow potterer, and you prefer this method to the one named in 162, give him the middle beat, and let his faster companions take the flanks. In our small English fields you have not space enough, but on our moors, and in many parts of the Continent, it cannot be want of room that will prevent your accomplishing it. To do this well, however, and not interfere with each other's ground, how magnificently must your dogs be broken! In directing their movements, the assistance that would be given you by each dog's acknowledging his own particular whistle, and no other—275—is very apparent.

164. It is difficult enough to make three dogs traverse across you on tolerably distinct parallels; and at a judicious distance between the parallels you will find it hopeless to attempt it with more than three; and one can hardly imagine a case in which it would be advantageous to uncouple a greater number of good rangers. If, however, the scarcity of game, and the extensiveness of your beat, or any peculiar fancy, induce you habitually to use four dogs, hunt one brace to the right, the other to the left; and, so far as you can, let those which *form a brace be of equal speed*.* Your task will be facilitated by your always keeping the same brace to one flank—I mean, by making one brace constantly hunt to your right hand; the other brace to your left. The same reasoning holds with regard to assigning to each

* A rule to be followed whenever you employ relays of braces.

dog a particular side when hunting three, according to the mode described in last paragraph. It should, however, be borne in mind, that constantly hunting a dog in this manner on one and the same flank, tends to make him range very disagreeably whenever employed single-handed.

165. If you hunt five dogs, four of them ought to work by braces to the right and left, and the fifth—the dog whose rate of speed most varies from the others—should have a narrow beat assigned him directly in advance of you.

166. If three brace are to be used, let the third brace hunt the central ground, as recommended for the fifth dog—or they could be worked in leashes, one on the right of the gun, the other on the left.

167. These are the correct *theoretical* rules, and the more closely you observe them, the more truly and killingly will your ground be hunted.

168. Probably you will think that such niceties are utterly impracticable. They must be impracticable if you look for mathematical precision; but if you hope to shoot over more than mere rabble, you should work upon *system*. If you do not, what can you expect but an unorganized mob?—an undrilled set, perpetually running over each other's ground,—now grouped in this part, now crowded in that,—a few likely spots being hunted by all (especially if they are old dogs), the rest of the field by none of them; and to control whose unprofitable wanderings, why not employ a regular huntsman and

a well-mounted whip? Doubtless it would be absurd to hope for perfect accuracy in so difficult a matter as a systematic range in a brigade of dogs; but that you may approach correctness, take a true standard of excellence. If you do not keep perfection in view, you will never attain to more than mediocrity. I earnestly hope, however, that it cannot be your wish to take out a host of dogs—but should you have such a singular hobby, pray let them be regularly brigaded, and not employed as a pack. In my opinion, under no circumstances can more than relays of leashes be desirable; but I should be sorry in such matters to dispute any man's right to please himself; I only wish him, whatever he does, to strive to do it correctly.

169. Some men who shoot on a grand scale make their keepers hunt each a distinct brace of dogs,—the gun going up to whatever dog points. It is the most killing plan to adopt; but that is not the matter we were considering. The question was, what method a man ought to pursue who had a fancy to himself hunt many dogs at a time.

170. If a professional breaker could show you a brigade of dogs well trained to quarter their ground systematically, and should ask from fifty to sixty guineas* a brace for them, you ought not to be surprised. What

* 250 to 300 dollars. This would be by no means an extraordinary price here, however extraordinary it might be to see dogs so qualified.—H. W. H.

an extent of country they could sweep over in an hour and not leave a bird behind ! And consider what time and labor must have been spent in inculcating so noble a range. He would have been far better paid if he had received less than half the money as soon as they “pointed steadily,” both at the living and the dead ; “down charged ;” “backed :” and were broken from “chasing hare,” or noticing rabbits.

171. Some men fancy that the faster they walk, the more country they hunt. This is far from being always the case. Dogs travel at one rate, whether you walk fast or slow, and the distance between the parallels on which they work—being determined by the fineness of their noses, and the goodness of the scent—ought not to be affected by your pace. Suppose, therefore, that you shoot in an unenclosed country, whether you walk quickly, or merely crawl along, the only difference in the beat of your dogs *ought* to be that, in the latter case, they range further to the right and the left. You thus make up in your *breadth* what you lose in your *length* of beat.

172. Nor do the fastest dogs, however well they may be broken, always truly hunt the most ground. The slower dogs have frequently finer olfactory nerves than their fleeter rivals,—therefore the parallels on which the former work may correctly be much wider apart than the parallels of the latter. The finer nose in this manner commands so much more ground that it beats the quicker heels out and out.

173. You will see, then, how judicious it is to show

forbearance and give encouragement to the timid, but high-bred class* of dogs described in 114; for it is obvious that, though they may travel slower, yet they may really hunt *properly*, within a specified time, many more acres of ground than their hardier and faster competitors; and it is certain that they will not so much alarm the birds. Dogs that are most active with their heels are generally least busy with their noses.

CHAPTER IX.

FIRST LESSON IN AUTUMN CONTINUED. "POINT" NOT RELINQUISHED FOR "DOWN CHARGE."

174. To proceed, however, with our imaginary September day's work. I will suppose that your young dog has got upon birds, and that from his boldness and keenness in hunting you need not let him run riot on a haunt, as you were recommended (in 111) when you wished to give courage and animation to a timid dog. You must expect that his eagerness and delight will make him run in and flush them, even though you should have called out "Toho" when first you perceived his stern begin

* It is admitted, however, that they are often difficult animals to manage; for the *least* hastiness on the part of the instructor may create a distrust that he will find it very hard to remove.

feathering, and thence judged that his olfactory nerves were rejoicing in the luxurious taint of game. Hollo out "Drop" most energetically. If he does not immediately lie down, crack your whip loudly to command greater attention. When you have succeeded in making him lie down, approach him quietly: be not angry with him, but yet be stern in manner. Grasping the skin of his neck, or, what is better, putting your hand within his collar—for he ought to wear a light one—quietly drag him to the precise spot where you think he was *first* aware of the scent of the birds. There make him stand—if stand he will, instead of timidly crouching—with his head directed towards the place from which the birds took wing, and by frequently repeating the word "Toho," endeavor to make him understand that he ought to have pointed at that identical spot. Do not confuse him by even threatening to beat him. The chances are twenty to one that he is anxious to please you, but does not yet know what you wish. I assume also that he is attached to you, and his affection, from constantly inducing him to exert himself to give satisfaction, will greatly develope his observation and intelligence.

175. Consider it a golden rule never to be departed from—for I must again impress upon you a matter of such importance—invariably to drag a dog who has put up birds incautiously, or wilfully drawn too near them, and so sprung them—or, what is quite as bad,—though young sportsmen will not sufficiently think of it,—

endangered their rising out of shot—to the exact spot at which you judge he ought to have pointed at first, and awaited your instructions.

176. Think for one moment what could be the use of chiding—or beating, as I have seen some * * * * * do—the poor animal at the spot where he flushed the birds. You are not displeased with him (or ought not to be) because the birds took wing,—for if they had remained stationary until he was within a yard of them, his fault would have been the same: nor are you angry with him because he did not catch them—which interpretation he might, as naturally as any other, put upon your rating him at the spot where he flushed them—you are displeased with him for *not having pointed* at them steadily the moment he became sensible of their presence. This is what you wish him to understand, and this you can only teach him by dragging him, as has been so often said, to the spot at which he ought to have “toho-ed” them. Your object is to give the young dog, by instruction, the caution that most old dogs have acquired by experience. Doubtless experience would in time convince him of the necessity of this caution; but you wish to *save* time,—to anticipate that experience; and by a judicious education impart to him knowledge which it would take him years to acquire otherwise. What a dog gains by experience is not what you teach him, but what he teaches himself.

177. Many carelessly-taught dogs will, on first recognising a scent, make a momentary point, and then slowly

crawl on until they get within a few yards of the game—if it be sufficiently complaisant to allow of such a near approach—and there “set” as steady as a rock by the hour together. Supposing, however, that the birds are in an unfriendly, distant mood, and not willing to remain on these neighborly terms, “your game is up,” both literally and metaphorically,—you have no chance of getting a shot. This is a common fault among dogs hastily broken in the spring.

178. But to resume our supposed lesson. You must not be in a hurry—keep your dog for some time—for a long time, where he should have pointed. You may even sit down alongside him. Be patient; you have not come out so much to shoot, as to break in your dog. When at length you give him the wave of the hand to hie him on to hunt, you must not part as enemies, though I do not say he is to be caressed. He has committed a fault, and he is to be made sensible of it by your altered manner.

Suppose that, after two or three such errors, all treated in the way described, he makes a satisfactory point. Hold up your right hand, and the moment you catch his eye, remain quite stationary, still keeping your arm up. Dogs, as has been already observed, are very imitative; and your standing stock still will, more than anything else, induce him to be patient and immovable at his point. After a time—say five minutes, if, from the hour of the day and the dog’s manner, you are convinced that the birds are not stirring—endeavor to get up to

him so quietly as not to excite him to move. Whenever you observe him inclined to advance,—of which his lifting a foot or even raising a shoulder, or the agitation of his stern will be an indication,—stop for some seconds, and when by your raised hand you have awed him into steadiness, again creep on. Make your approaches within his sight, so that he may be intimidated by your eye and hand. If you succeed in getting near him without unsettling him, actually stay by him, as firm as a statue, for a quarter of an hour by one of Barwise's best chronometers. Let your manner, which he will observe, show great earnestness. Never mind the loss of time. You are giving the dog a famous lesson, and the birds are kindly aiding you by lying beautifully and not shifting their ground.

179. Now attempt a grand *coup*, in which if you are successful, you may almost consider your dog made staunch for ever. Keeping your eye on him, and your hand up—of course the right one—make a circuit, so that the birds shall be between him and you. Be certain that your circle is sufficiently wide—if it is not, the birds may get up behind you, and so perplex him that at his next find he will feel doubtful how to act. Fire at no skirter, or chance shot. Reserve yourself for the bird or birds at which he points; a caution more necessary on the moors than on the stubbles, as grouse spread while feeding. When you have well headed him, walk towards him and spring the birds. Use straight shooting-powder. Take a cool aim well forward, and knock

down one. Do not flurry the dog by firing more than a single barrel, or confuse him by killing more than *one* bird. If you have been able to accomplish all this without his stirring—though, to effect it, you may have been obliged to use your voice—you have every right to hope, from his previous education, that he will readily “down-charge” on hearing the report of your gun. Do not hurry your loading:—indeed, be unnecessarily long, with the view of making him at all such times patient and steady. If, in spite of all your calls and signals, he ever gives chase to the sprung birds, make him “drop,”—instantly if possible—and proceed much as described in 174, dragging him back to the place where he should have “down-charged.”

180. When you have loaded, say “Dead,”* in a low voice, and signalling to “heel” make him come up to you, yourself keeping still. By signs—xi. of 119—place him as near as you can, *but to leeward* of the dead bird. Then, and not till then, say, “Find;” give him no other assistance. Let him have plenty of time to make out the bird. It is not to be find and *grip*, but find and *point*,† therefore the moment you perceive he is aware

* As he acquires experience he will wish to rise the moment he observes that your loading is completed. Do not allow him to move, however correctly he may have judged the time. Let his rising be always in obedience to signal or word. You may make a mistake in charging, or your friend may not load as expeditiously as yourself.

† Never being allowed to grip conduces so much to making

that it is before him, make him—by word of command—“toho:”—go up to him, stay for a while alongside him, then make a small circuit to head him, and have the bird between you and him; approach him. If he attempt to dash in, thunder out “No,” and greet him with at least the sound of the whip: slowly pick up the dead bird; call the dog to you; show him the bird; but on no account throw it to him, lest he snatch at it; lay it on the ground, encourage him to sniff it; let him—for reason why see 216—turn it over with his nose—teeth closed—say to him, “Dead, dead;” caress him; sit down; smoothe the feathers of the bird; let him perceive that you attach much value to it; and after a while loop it on the game bag, allowing him all the time to see what you are doing. After that, make much of him for full five minutes: indeed with some dogs it would be advisable to give a palatable reward, but be not invariably very prodigal of these allurements; you may have a pupil whose attention they might engross more than they ought. Then walk about a little time with him at your heels. All this delay and caressing will serve to show him that the first tragedy is concluded, and has been satisfactorily performed. You may now hie him on to hunt for more birds.

181. Pray mind what is said about making your youngster point the dead bird staunchly, the moment you perceive that he first scents it. Should he be allowed to him tender-mouthed, that, should he hereafter be permitted to lift his game, it is probable he will deliver it up perfectly uninjured.

approach so near as to be able to touch it—instead of being made to point the instant he finds,—the chances are, that if hard-mouthed he will give it a crunch, if tender-mouthed a fumbling of the feathers; and either proceeding satisfying him, that he will quit it, and not further aid you in a search. As “pointing” is only a natural pause—prolonged by art—to determine exactly where the game is lying, preparatory to rushing forward to seize, it would be unreasonable to expect him willingly to make a second point at game he has not only found but mouthed—the evil, however, does not rest here. There is such a disagreeable thing as blinking a dead bird, no less than blinking a sound one. For mouthing the bird you may possibly beat the dog, or for nosing it and not pointing you may rate him harshly, either of which, if he be not of a bold disposition, may lead, on the next occasion, to his slinking off after merely obtaining a sniff. You ought, in fact, to watch as carefully for your pupil’s first “feathering” upon the dead bird, as you did—174—upon his first coming upon the covey. You see, then, that your teaching him to “point dead” is absolutely indispensable; unless, indeed, you constantly shoot with a retriever. Pointing at a live bird or at a dead one should only differ in this, that in the latter case the dog makes a nearer point. *Begin* correctly, and you will not have any difficulty; but you may expect the greatest if you let your dog go up to one or two birds and mouthe them, before you commence making him point them. The following season, should you then

permit him to lift his game, it will be time enough to dispense with his "pointing dead." I dwell upon this subject because many excellent dogs, from not having been properly taught to "point dead," often fail in securing the produce of a successful shot, while, on the contrary, with judiciously educated dogs it rarely happens that any of the slain or wounded are left on the field. Moreover, the protracted search and failure—as an instance see 217—occasions a lamentable loss of time. Were a sportsman who shoots over dogs not well broken to "point dead"—or retrieve—to calculate accurately, watch in hand, he would, I think, be surprised to find how many of his best shooting hours are wasted in unprofitable searching for birds of the certainty of whose untimely fate his dogs had probably long before fully convinced themselves.

182. As to the word "Dead," whether you choose to continue using it immediately after loading, or, as I have recommended—xi. of 119—*after a time* omit it, and merely let the signal to "heel" intimate that you have killed, always make your dog go to you before you allow him to seek for the fallen bird.

183. Some may say, "As a dog generally sees a bird fall, what is the use of calling him to you before you let him seek?—and even if he does not see the bird, why should any time be lost? Why should not you and he go as direct to it as you can?"

184. Provided you have no wish that the "finder"—see 295—rather than any of his companions, should be

allowed the privilege of "seeking dead," I must admit that in the cultivated lands of England, when a dog "sees a bird fall," he might in nine cases out of ten go direct to it without inconvenience. Even here, however, there are occasions when intervening obstacles may prevent you observing what the dog is about; and in cover, so far from being able to give him any assistance by signalling, you may be ignorant whether or not he has seen the bird knocked over, or is even aware of the general direction in which he ought to seek. But in the oft-occurring cases in which "he does not see the bird fall," it is obvious—particularly when he happens to be at the extremity of his beat,—that you will far more quickly place him where you wish, if you make him, at first, run up to you, and then advance from you, straight to the bird, by your forward signal—190. These good results at least will follow, if you remain stationary, and make him join you. You do not lose sight of the spot where you marked that the bird or birds fell. The foil is not interfered with by your walking over the ground—a matter of much importance, especially on bad-scenting days. The dog, if habituated to "seek" without your companionship, will readily hunt morasses and ravines, where you might find it difficult to accompany him. He will feel the less free to follow his own vagaries; and this consciousness of subjection will dispose him to pay more watchful attention to your signals. He will the more patiently wait at the "down charge;" and when you are reloaded will not be so tempted to dash reck-

lessly after the bird, regardless whether or not he raises others on the way. If he is dragging a cord, you can the more easily take hold of its end, in order to check him, and make him point when he first winds the dead bird—and, should you be shooting over several dogs, by none of them being permitted to run direct to the fallen bird they will the less unwillingly allow you to select the one who is to approach close to you before “seeking dead.”

185. The opponents of this method argue, that the practice may give the dog the bad habit of running immediately after the “down charge” to the gun, instead of recommencing to hunt; particularly if he is shot over by a first-rate performer. Granted; but is not the temptation to bolt off in search of a dead bird still stronger? To check the former evil, endeavor to make the coming to “heel” an act of obedience rather than a voluntary act, by never failing, as soon as you are re-loaded, to give the customary signal—VIII. of 119—when you have killed, or the signal to “hie on” should you have missed.

186. Moreover, you will sometimes meet with a dog who, when a bird has been fired at, though it be the first and only one sprung of a large covey, commences “seeking dead” immediately after the “down charge,” apparently considering that his first duty. This sad, sad fault—for it frequently leads to his raising the other birds out of shot—is generally attributable to the dog’s having been allowed to rush at the fallen bird, instead of

being accustomed to the restraint of having first to run up to the gun.

187. To prevent your pupil ever behaving so badly, often adopt the plan of not "seeking dead" immediately after loading, especially if the birds are lying well. Mark accurately the spot where your victim lies, and closely hunt for others, endeavoring to instil great caution into the dog, much in the manner—being guided by his disposition and character—described in 144, 145, and 228. As long as any of the covey remain unsprung, you ought not to pick up one dead bird, though you should have a dozen on the ground. Your dog ought not even to "down charge" after you have fired, if he is fully aware that more birds are before him. To impart to him the knowledge that, *however important is the "down charge," his continuing at his point is still more so*, you may, when the birds are lying well and he is at a fixed point, make your attendant discharge a gun at a little distance while you remain near the dog, encouraging him to maintain his "toho." If you have no attendant, and the birds lie like stones, fire off a barrel yourself while the dog is steadily pointing. He will fancy you see birds which he has not noticed, and, unless properly tutored and praised by you, will be desirous to quit those he has found, to search for the bird he conceives you have shot.

188. It is a fine display of intelligence in the dog, and of judicious training in the breaker—may it be your desert and reward ere long to witness it in your pupil,—

when a pointer—or setter—in goodly turnips or strong potatoes draws upon birds which obligingly rise one after the other, while by continuing his eloquent attitude he assures you that some still remain unsprung, to which he is prepared to lead you if you will but attend to them and him, and, instead of pot-hunting after those you have killed, wait until his discriminating nose informs him that, having no more strangers to introduce, he is at liberty to assist you in your search.

189. To revert, however, to the point particularly under discussion, viz., whether you prefer that your dog go direct to the fallen bird, or—as I strongly recommend—that he first join you, pray be consistent, exact which you will, but always exact the same, if you are anxious to obtain cheerful unhesitating obedience.

190. I have seen the advantage of the latter method very strikingly exemplified in America, in parts of which there is capital snipe-shooting.* In the high grass and rushes on the banks of the Richelieu, many a bird have I seen flushed and shot at, of which the liver and white pointer, ranging at a little distance, has known nothing. As he was well broken in, on hearing the report of the gun, he, of course, dropped instantly. His master, when he had reloaded, if the bird had fallen, used invariably to say “Dead,”† in a low tone of voice, on which the

* I reserve this anecdote on account of its interest and applicability to American readers.—H. W. H.

† In order to work in silence, I advised—xi. of 119—that the sig

dog would *go up to him*; and then his master, without stirring from the spot where he had fired, directed him by signals to the place where the bird had tumbled, and in proceeding thither, the dog often had to swim the stream. His master then said "Find." At that word, and not before it, his intelligent four-footed companion commenced the search for the bird, nor did he ever fail to find and bring; and so delicate was his mouth that I have often seen him deliver up a bird perfectly alive, without having deranged a feather, though, very probably, he had swam with it across one of the many creeks which intersect that part of the country. If the shot was a miss, his master's silence after reloading, and a wave of his arm to continue hunting—or the command to "Hie on," if the dog was hidden by the rushes—perhaps a low whistle would have been better,—fully informed his companion of the disappointment. He was quite as good on the large quail, and small wood-cock found in Canada, which latter makes a ringing noise on rising, not unlike the sound of a distant soft bell; but reminiscences of that capital old dog are leading me away from your young one.

191. For some days you cannot shoot to your pupil too steadily and quietly—I had well nigh said too slowly. By being cool, calm, and collected yourself, you will

nal to "heel" whenever the dog could observe it, should supersede the word "dead." It might be necessary to sing out with a boatswain's voice should the dog be far off.



SETTERS.—BOB.

ROBERTT & EDMONDS. SC.

W. H. WOODS. DEL.

make him so. I am most unwilling to think that you will be too severe, but I confess I have my misgivings lest you should occasionally overlook some slight faults in the elation of a successful right and left. Filling the game-bag must be quite secondary to education. Never hesitate to give up any bird if its acquisition interfere with a lesson. Let all that you secure be done according to rule, and in a sportsmanlike manner.

CHAPTER X.

FIRST LESSON IN AUTUMN CONTINUED. ASSISTANT.

192. It is proper you should be warned that you must not always expect a dog will "toho" the first day as readily as I have described, though most will, and some—especially pointers—even more quickly, if they have been previously well-drilled, and have been bred for several generations from parents of pure blood.

I do not say bred in and in. Breeding in and in, to a certainty, would enfeeble their intellects as surely as their constitutions. In this way has many a kennel been deprived of the energy and endurance so essential in a sportsman's dog.

193. As in the present instance, it often occurs that a

dog is less inclined to dash in at first than when he is more acquainted with birds. He is suddenly arrested by the novelty of the scent, and it is not until he is fully assured from what it proceeds that he longs to rush forward and give chase. In autumnal breaking the dog gets his bird—it is killed for him—he is satisfied—and therefore he has not the same temptation to rush in as when he is shown birds in the spring.

194. If you find your dog, from excess of delight and exuberance of spirits, less under general command than from his initiatory education you had expected, and that he will not “toho ” steadily at the exact spot at which you order him, at once attach a checkcord to his collar. It will diminish his pace, and make him more cautious and obedient. The moment you next see him begin to feather, get up quickly, *but without running*, to the end of the cord, and check him with a sudden jerk, if you are satisfied that game is before him and that he ought to be pointing. If from his attitude and manner you are *positive* that there is game, drive a spike—or peg—into the ground, and tie the cord to it. I only hope the birds will remain stationary. If they do, you can give him a capital lesson by remaining patiently alongside of him and then heading him and the birds in the manner before described—178, 179.

195. As a general rule, an attendant or any companion cannot be recommended, because he would be likely to distract a young dog's attention ; but an intelligent fellow who would readily obey your signals, and not

presume to speak, would doubtless, with a very wild dog, be an advantageous substitute for the spike. You could then employ a longer and slighter cord than usual, and, on the man's getting hold of the end of it, be at once free to head and awe the dog. Whenever you had occasion to stand still, the man would, of course, be as immovable as yourself.

Your signals to him might be:—

The gun held up,—“Get near the dog.”

Your fist clenched,—“Seize the rope.”

Your fist shaken,—“Jerk the cord.”

Your hand spread open,—“Let go the cord.”

Or any signs you pleased, so that you understood each other without the necessity of speaking.

196. Should it ever be your misfortune to have to correct in a dog evil habits caused by past mismanagement, such an attendant, if an active, observant fellow, could give you valuable assistance, for he sometimes would be able to seize the cord immediately the dog began “feathering,” and generally would have hold of it before you could have occasion to fire. But the fault most difficult to cure in an old dog is a bad habit of ranging. If, as a youngster, he has been permitted to beat as his fancy dictated, and *has not been instructed in looking to the gun for orders*, you will have great, very great difficulty in reclaiming him. Probably he will have adopted a habit of running for a considerable distance up wind, his experience having shown him that it is one way of finding birds, but not having taught him that

to seek for them by crossing the wind would be a better method.

The great advantage of teaching a dog to point the instant he is sensible of the presence of birds—175—and of not creeping a foot further until he is directed by you, is particularly apparent when birds are wild. While he remains steady, the direction of his nose will lead you to give a tolerable guess as to their “whereabouts,” and you and your companion can keep quite wide of the dog—one on each side,—and so approach the birds from both flanks. They, meanwhile, finding themselves thus intercepted in three directions, will probably lie so close as to afford a fair shot to at least one gun, for they will not fail to see the dog and be awed by his presence. Raise your feet well off the ground to avoid making a noise. Walk quickly, but with no unnecessary flourish of arms or gun.

197. You must not, however, too often try to work round and head your pupil when he is pointing. Judgment is required to know when to do it with advantage. If the birds were running, you would completely throw him out, and greatly puzzle and discourage him, for they probably would then rise out of shot, behind you if they were feeding up wind,—behind him if they were feeding down wind. Far more frequently make him work out the scent by his own sagacity and nose, and lead you up to the birds, every moment bristling more and more, at a pace entirely controlled and regulated by your signals. These being given with your right hand will be more

apparent to him if you place yourself on his left side. It is in this manner that you give him a lesson which will *hereafter* greatly aid him in recovering slightly winged birds,—in pressing to a rise the slow-winged, but nimble-heeled rail,—or in minutely following the devious mazes through which an old cock pheasant, or yet more, an old cock grouse, may endeavor to mislead him. And yet this lesson should not be given before he is tolerably confirmed at his point, lest he should push too fast on the scent; and make a rush more like the dash of a cocker than the sober, convenient “road” of a setter. As his experience increases he will thus acquire the valuable knowledge of the position of his game—he will lead you to the centre of a covey, or what is of greater consequence—as grouse spread—to the centre of a pack,—instead of allowing himself to be attracted to a flank by some truant from the main body,—and thus get you a good double shot, and enable you effectually to separate the birds—he will, moreover, become watchful, and sensible of his distance from game—a knowledge all important, and which, be it remarked, he never could gain in turnips, or potatoes, or any thick cover.

198. There is another and yet stronger reason why you should not consider it a rule always to head your young dog at his point. You may—although at first it seems an odd caution to give—make him too stanch. This, to be sure, signifies less with partridges than with most birds; but if you have ever seen your dog come to a fixed point, and there, in spite of all your

efforts, remain provokingly immovable—plainly telling you of the vicinity of birds, but that you must find them out for yourself—your admiration of his steadiness has, I think, by no means reconciled you to the embarrassing position in which it has placed you. I have often witnessed this vexatious display of stanchness, although the owner cheered on the dog in a tone loud enough to alarm birds two fields off.

199. A keeper will sometimes praise his dog for such stanchness ; but it is a great fault, induced probably by over-severity for former rashness,—and the more difficult to be cured, if the animal is a setter, from the crouching position he often naturally assumes when pointing.

200. I here desire to warn you against the too common error of fancying that a young dog is making false points if birds do not get up directly. They may have taken leg-bail, and thus have puzzled him in his inexperience. Dogs not cowed by punishment will, after a little hunting, seldom make false points, while they are unfatigued. To a certainty they will not draw upon a false point for any distance : therefore, never punish what is solely occasioned by over-caution. Your doing so would but increase the evil. Self-confidence and experience are the only cures for a fault that would be a virtue if not carried to excess. Even a good dog will occasionally make a point at larks from over-caution when birds are wild ; but see the first note to 144.

201. After you have shot over a dog a short time. his

manner and attitude will enable you to guess pretty accurately whether birds are really before him; whether they are far off or near; and whether or not they are on the move. Generally speaking, the higher he carries his head, and the less he stiffens his stern, the further off are the birds. If he begins to look nervous, and become fidgety, you will seldom be wrong in fancying they are on the run. But various, and at times most curious, are the methods that dogs will adopt, *apparently* with the wish to show you where the birds are, and *certainly* with the desire to get you a shot.

CHAPTER XI.

FIRST LESSON IN AUTUMN CONCLUDED. BAR. LEG STRAP.
SPIKE COLLAR.

202. AFTER a few trials you will, I hope, be able to dispense with the peg recommended in 194, and soon after with the checkcord also. But if your dog possesses unusually high spirits, or if he travels over the ground at a pace which obviously precludes his making a proper use of his nose, it may be advisable to fasten to his collar a bar, something like a diminutive splinter-bar, that it may, by occasional knocking against his shins,

feelingly admonish him to lessen his stride. If he gets it between his legs and thus finds it no annoyance, attach it to both sides of his collar from points near the extremities. One of his forelegs might occasionally be passed through the collar; but this plan is not so good as the other; nor as the strap on the hind leg—56. These means—to be discarded, however, as soon as obedience is established—are far better than the *temporary* ascendancy which some breakers establish by low diet and excessive work, which would only weaken his spirits and his bodily powers, without eradicating his self will, or improving his intellect. You want to force him, when he is in the highest health and vigor, to learn by experience the advantage of letting his nose dwell longer on a feeble scent.

203. I have made no mention of the spiked collar, because it is a brutal instrument, which none but the most ignorant or unthinking would employ. It is a leather collar, into which nails, much longer than the thickness of the collar, have been driven, with their points projecting inwards. The French spike-collar is nearly as severe. It is formed of a series of wooden balls,—larger than marbles,—linked—about two and a half inches apart—into a chain by stiff wires bent into the form of hooks. These sharp pointed hooks punish cruelly when the checkcord is jerked.

204. We have, however, a more modern description of collar, which is far less inhuman than either of those I have mentioned, but still I cannot recommend its

adoption, unless in extreme cases; for though not so severely, it, likewise, punishes the unfortunate dog, more or less, by the strain of the checkcord he drags along the ground: and it ought to be the great object of a good breaker as little as is possible to fret or worry his pupil, that all his ideas may be engaged in an anxious wish to wind birds. On a leather strap, which has a ring at one end, four wooden balls—of about two inches in diameter—are threaded like beads, at intervals from each other and the ring, say, of two inches—the exact distance being dependent on the size of the dog's throat. Into each of the balls sundry short pieces of thickish wire are driven, leaving about one-sixth of an inch beyond the surface. The other end of the strap—to which the checkcord is attached—is passed through the ring. This ring being of somewhat less diameter than the balls, it is clear, however severely the breaker may pull, he cannot compress the dog's throat beyond a certain point. The effect of the short spikes is rather to crumple than penetrate the skin.

205. I have long been sensible of the aid a spiked collar would afford in reclaiming headstrong, badly educated dogs, if it could be used at the moment—and only at the precise moment when punishment was required,—but not until lately did it strike me how the collar could be carried so that the attached cord should not constantly bear upon it, and thereby worry, if not pain the dog. And had I again to deal with an old offender. who incorrigibly crept in after pointing, or

obstinately "rushed into dead," I should feel much disposed to employ a slightly spiked collar in the following manner.

206. That the mere carrying the collar might not annoy the dog, I would extract or flatten the nails fixed on the top of the collar, on the part, I mean, that would lie on the animal's neck. This collar I would place on his neck, in front of his common light collar. I would then firmly fasten the checkcord, in the usual way, to the spiked collar; but, to prevent any annoyance from dragging the checkcord, at about five or six inches from the fastening just made I would attach it to the common collar, with very slight twine—twine so slight that, although it would not give way to the usual drag of the checkcord, however long, yet it would readily break on my having to pull strongly against the wilful rush of an obstinate dog, when, of course, the spikes would punish him, as the strain would then be borne by the spiked collar alone.

207. Guided by circumstances, I would afterwards either remove the spiked collar, or, if I conceived another bout necessary, refasten the checkcord to the common collar with some of the thin twine, leaving, as before, five or six inches of the checkcord loose between the two collars.

208. If you should ever consider yourself forced to employ a spiked collar, do not thoughtlessly imagine that the same collar will suit all dogs. The spikes for a thin coated pointer ought to be shorter than for a coarse

haired setter! You can easily construct one to punish with any degree of severity you please. Take a common leather collar; lay its inner surface flat on a soft deal board: through the leather drive with a hammer any number of tacks or flat-headed nails: then get a cobbler to sew on another strap of leather at the back of the nails, so as to retain them firmly in position.

209. I have supposed that your dog has *scented* the birds before they rose, but if he springs them without having previously noticed them—as in some rare cases happens even to well-bred dogs—you *must* bring him back to the spot at which you feel assured that he ought to have been sensible of their presence, and *there* make him “Toho.” Afterwards endeavor to make him aware of the haunt by encouraging him to sniff at the ground that the birds have just left. The next time watch very carefully for the *slightest* indication of his feathering, and then instantly call out “Toho.” After a few times he will, to a certainty, understand you.

210. You should kill outright the few first birds at which you fire. I would infinitely prefer that you should miss altogether than that one of the two or three first birds should be a runner. Afterwards you have full leave to merely wing a bird; but still I should wish it not to be too nimble. This is a good trial of *your* judgment as well as the dog’s. I hope he is to leeward of the bird, and that it will not catch his eye. See he touches on the haunt. Do not let him work with his nose to the ground. “Up, up,” must be your encouraging words,

—or “On, on,” according to circumstances,—whilst with your right hand—IV. of 119—you are alternately urging and restraining him, so as to make him advance at a suitable pace. From his previous education, not being flurried by any undue dread of the whip, he will be enabled to give his undisturbed attention, and devote all his faculties to follow unerringly the retreating bird. But from inexperience he may wander from the haunt. On perceiving this, bring him, by signals, back to the spot where he was apparently last aware of the scent. He will again hit it off. If you view the bird ever so far ahead, on no account run. I hope you will at length observe it lie down. Head it, if possible, and strike it with your whip, if you think you will be unable to seize it with your hand. Endeavor to prevent its fluttering away;—it is too soon to subject the youngster to such a severe trial of his nerves and steadiness. Then,—having put the poor creature out of its misery, by piercing its skull, or rapping its head against your gun, as before—180—show your dog the gratifying prize which your combined exertions have gained.

211. Should he unluckily have caught sight of the running bird, and, in spite of all your calls, have rushed forward and seized it, you ought to have proceeded as described in 221. Clearly, however, you would not have dragged the dog back to the place where he “down charged,” but merely to the spot from which he had made his unlawful rush. If the bird had been very active, it would have been far better to have fired at it a

second time—while it was running—than to have incurred the risk of making your dog unsteady by a wild pursuit. Suppose that it was not winged, but rose again on your approaching it, and fluttered off,—a hard trial for the young dog,—you must, however, have made him bear it, and obey your loud command to “drop,”—you would—or should—have taken another shot, and have proceeded in exactly the same manner as if this had been your first find—179, 180.

212. As the wounded bird was to windward of the dog, the course to follow was obvious,—it was plain sailing; but the case would have varied greatly if the dog had been to windward. Had you pursued the usual plan, he must have roaded the bird by the “foot;” and the danger is, that in allowing him to do so, you may create in him the evil habit of hunting with his nose close to the ground, which is, above all things, to be deprecated. You have another mode—you can “lift” the dog—I suppose you know the meaning of that hunting term,—and make him take a large circuit, and so head the bird, and then proceed as if it had fallen to windward.

213. The latter plan would avoid all risk of your making him a potterer, and it is, I think, to be recommended, if you find him naturally inclined to hunt low. But the former method, as a lesson in “footing,” must be often resorted to, that he may learn unhesitatingly to distinguish the “heel” from the “toe,” and how to push an old cock-grouse, or to flush a pheasant running through cover, or the red-legged, I was nearly saying,

the everlasting-legged partridge; * and, indeed, generally, how to draw upon his birds, and with confidence lead you to a shot, when they are upon the move and running down wind.—See end of 98 ; and for further directions, and for “seeking dead” with two dogs, look at 296. The heavy Spanish pointer, from his plodding perseverance and great olfactory powers, was an excellent hand at retrieving a slightly injured bird on a broiling, bad scenting day.

214. When I advised you—180—to let the dog “have plenty of time to make out the bird,” I spoke from personal experience, and from a vivid recollection of errors committed in my novitiate. A young hand is too apt to imagine that every bird which falls to his gun is killed outright, and lying dead on the spot where it fell. He will, therefore, often impatiently, and most injudiciously, call away the dog who, at a little distance, may have hit-off the trail of the winged bird, and be “footing” it beautifully.

215. If in these lessons you should lose one or two wounded birds, though it might not be a matter of any moment to yourself personally, it would be extremely vexatious on the dog’s account, because, in this early stage of his education, it would tend to discourage him. The feeling which you must anxiously foster in him is

* The speed with which one of these extremely beautiful, but in every other respect far, far inferior partridges will run, when only slightly wounded, is quite marvellous.

this, that after the word "find" * the search must never be relinquished, even though he be constrained to hunt from morning till night. And it is clear that to make an abiding, valuable impression, this lesson must be inculcated on the several first occasions with unremitting, untiring diligence.

216. Persevere, therefore, for an hour, rather than give up a wounded bird. Join in the search yourself. Even if you see where it lies, do not pick it up hastily. On the contrary, leave it, but mark well the spot. Keep on the move. Hold your gun as if in expectation of a rise. Pretend to seek for the bird in every direction, even for a good half hour, if you can encourage your dog to hunt so long. If, indeed, you see him flag, and get wearied and dispirited, gradually bring him close, but to leeward of the spot where the bird lies, in order to make him "point dead" and be rewarded for all his diligence by finding it himself. Let him, also, have a good sniff at it and nose it—but let there be no biting or mouthing—before you put it into the bag. Otherwise, what return has he for the pains he has taken?

217. It is no conclusive argument against the practice of allowing him to "nose," that many first-rate dogs

* The force of the word "Dead"—preceding the command "Find"—that joyous, exciting note of triumph—ought never to be lessened by being employed, as I have heard it, to stimulate a dog to hunt when no bird is down; or, like the shepherd-boy's cry of "Wolf! wolf!" it will have little influence at the moment when it should most animate to unremitting exertions.

have never been so indulged. It is certain that they would not have been worse if they had; and many a dog, that would otherwise have been extremely slack, has been incited to hunt with eagerness from having been so rewarded. There are dogs who, from having been constantly denied all "touseling," will not even give themselves the trouble of searching for any bird which they have *seen* knocked over, much less think of pointing it. They seem satisfied with this ocular evidence of its death; for, odd to say, these very dogs will often zealously obey the order to hunt for any bird whose fall they have not noticed; but on winding it they will indulge in no more than a passing sniff,—which sniff, unless you are watchful, you may not observe, and so lose your bird. Never fail, therefore, to let your pupil ruffle the feathers a little, while you bestow on him a caress or kind word of approbation. You then incite to perseverance, by, even with dogs, a very abiding motive,—“self-interest;” but mind the important rule, that his “nosing” be only *when* the bird is in your possession, not *before* it is in your possession. If you wish to establish for ever a confirmed perseverance in “seeking dead,” you must sacrifice *hours*—I say it seriously—rather than give up any of the first wounded birds. Be persuaded that every half hour spent in an unremitting search for *one* bird, if ultimately successful, will more benefit the young dog than your killing a *dozen* to him, should you bag them the moment you are reloaded. Of course you would not, when you are giving such a lesson in perseve-

rance, fire at another bird, even if it sprang at your feet,—for your doing so, whether you missed or killed, would unsettle the young dog, and make him relinquish his search. Be stimulated to present exertion by the conviction, that if he be not *now* well instructed, you must expect him to lose, season after season, nearly every bird only slightly disabled by a merely tipped wing.

218. I hope you will not say, as would most of our neighbors* on the other side of the Channel: “But if, instead of waiting to load, I had gone after the winged bird just as it fell, when first I saw it start off running, the evil you have now spoken of—215—could not have occurred, for there would have been but little risk of losing it.” Probably not, but you would almost have ruined your dog; and to secure this one bird, in all likelihood you would subsequently lose a hundred.† How could you with justice blame him if, when next

* In favor of such unsportsman-like haste they ingeniously argue that a continued noise after firing makes birds lie, from attracting their attention. They say that a sudden change to quiet—and a great change it must be, for a *chasseur* is always talking—alarms the birds. As an evidence of this, they adduce the well-known fact of its frequently happening that a partridge gets up the moment the guns have left the spot, though no previous noise had induced it to stir.

† Had you lost the bird from there being but little scent, it is probable you might have found it by renewing your search on your return homewards in the evening. If a runner, it would most likely have rejoined the covey.

you killed, he rushed headlong after the bird—instead of dropping patiently to the “down charge”—and so sprung a dozen birds while you were unloaded?

219. Perhaps you will say, “You tell me to fire at a running bird, but when a winged cock-pheasant or red-legged partridge is racing off *out of shot*, how am I to get it if I proceed in the slow, methodical manner you advise? May it not lead me an unsuccessful dance for an hour, if I do not allow the dog to shoot ahead and seize?” It may—but I hope months will pass before you witness such agility—and this shows that those who do not employ a retriever, and yet are sticklers for a setter’s—or pointer’s—never being permitted to touch a feather, must on such occasions get into a dilemma; and, unless they are willing to lose the bird, must plead guilty to the inconsistency of being pleased—however loudly they may roar out “Toho,” “ware dead,”—when they see their dog, in defiance of all such calls, disable it by a sudden grip. This plan, though frequently followed, cannot be correct. They blame the dog for doing what they really wish! and if he be too tender-mouthed to injure the bird, he keeps them at top speed, while he is alternately picking up the unfortunate creature—acting on his natural impulses—and letting it fall, on being rated. I therefore repeat, that even if you do not wish your dog constantly to retrieve—292—you would still act judiciously in teaching him as a puppy to fetch—86—for then he will give chase to the winged bird, and bring it to you *on getting the order*, instead of

permitting it to escape for a fresh *burst*, or carrying it off, as I have seen done. You thus maintain discipline. The dog will do what you wish, in obedience to orders, —not in opposition to orders. The sticklers for dogs never being allowed to nose a feather ought, unless they are quite willing to give up slightly-winged birds, not to shrink from the difficult task of teaching their pupils to stop and retain with their paws.

220. We have only spoken of instances 180, 210, 212, in which all has gone on smoothly, the dog most obediently dropping to shot and permitting *you* to take up the bird notwithstanding the poor creature's death-struggles. Suppose, however, and this may probably happen, that he does not restrain himself at the "down charge," but, in spite of all your calls and signals, rushes forward, yet yields to your menaces and halts in mid-career. It is well—your course is clear; you have to lug him back and threaten and lecture him. But should he not check himself until he sniffs the game, his stop then becomes a "point;" and if he is of a timid disposition, or has ever evinced any disposition to blink, you dare not force him to retrace his steps lest he should mistake your motives, and fancy himself encouraged to abandon his point. If you merely make him "down charge," you violate the axiom named in 255. In short you are in a difficulty. It is a nice case, in which your own judgment of the dog's character can alone decide you.

221. But, if from inadequate initiatory instruction—for I will maintain that such marked rebellion can arise from

no other cause—in the excitement of the moment he actually rushes in and seizes the bird, he must be punished, I am sorry to say it ; but however much we may deplore it, *he must* ; for he has been guilty of great disobedience, and he well knows that he has been disobedient. But the temptation was strong, perhaps too strong, for canine nature—that is to say, for canine nature not early taught obedience. The wounded bird was fluttering within sight and hearing—it was, too, the first he had ever seen,—and this is almost his first glaring act of disobedience ; be therefore merciful, though firm. Make him “drop.” Get up to him at once. Probably he will relinquish his grip of the bird ; if not, make him give it up to you, but do not pull it from him : that would only increase the temptation to tear it. Lay it on the ground. Then drag him back to the spot from which he rushed ; there make him lie down. Rate him. Call out “Toho.”* Crack the whip over him—and, I am pained to add, make use of it—but moderately, not severely. Three or four cuts will be enough, provided he has not torn the bird ; if he has, his chastisement must be greater. Let him now have one nibble without punishment, and soon a whole carcase will not suffice for his morning’s meal. Do not strike him across the body, but lengthwise.

222. An ill-tempered dog might attempt to bite you. Prevent the possibility of his succeeding, by grasping

* “Toho,” rather than “Drop,”—your object now being to make him stand at, and prevent his mouthing game ; for you are satisfied that he would have “down charged” had the bird been missed.

and twisting his collar with your left hand, still keeping him at the "down." Consider coolly whether you are flagellating a thick-coated dog, or one with a skin not much coarser than your own. Pause between each cut; and, that he may comprehend why he is punished, call out several times, but not loudly, "Toho—bad—toho," and crack your whip. Let your last strokes be milder and milder, until they fall in the gentlest manner—a manner more calculated to awaken reflection than give pain. When the chastisement is over stand close in front of him, the better to awe him, and prevent his thinking of bolting. Put the whip quietly in your pocket, but still remain where you are, occasionally rating and scolding him while you are loading; gradually, however, becoming milder in manner that he may be sensible that though your dissatisfaction at his conduct continues, his punishment is over—241 to 242. Indeed, if you have any fear of his becoming too timid, you may at length fondle him a little, provided that while you so re-encourage him, you continue to say "Toho—toho," most impressively—then, giving him the wind, go up together to the bird and make him "point dead" close to it. Take it up, and let him fumble the feathers before you loop it on the bag.

223. Never let a dog whom you have been forced to chastise bolt or creep away until you order him. If he is ever allowed to move off at *his* wish, he will improve upon the idea, and on the next occasion will far too soon anticipate *yours*. And do not send him off until

he has given some evidence of having forgiven you, and of his desire to be reconciled, by crawling towards you, for instance, or wagging his tail. On no occasion—under circumstances of ever such great provocation—be so weak or irritable—but I hope you do not need the warning—as to give him a kick or a blow when he is going off. He ought to have stood with reassured confidence alongside of you, for perhaps a minute or so, before you sanctioned his departure; and the severer his punishment the longer should have been the detention. You are always to part tolerable friends, while he feels perfectly convinced that his chastisement is over. If you do not, you may find it rather difficult to catch him when he commits another fault. It will be owing to your own injudiciousness if he ever becomes afraid of approaching you after making a blunder. Should he be so, sit down. He will gradually draw near you; then quietly put your hand on his collar.

224. If a man cannot readily get hold of any dog under his tuition whom he desires to rate or punish, you may be certain that he fails either in temper or judgment; perhaps in both. He may be an excellent man; but he cannot be a good dog-breaker. There are men who get quite enraged at a dog's not coming instantly to "heel," on being called. When at length the poor brute does come within reach, he gets a blow, perhaps a licking—a blow or licking, he has the sense to see he should have longer avoided had he stayed longer away. Thus the punishment increases instead of remedying the evil.

225. Never correct or even rate a dog, in the mere *belief* that he is in error; be first *convinced* of his guilt. If you have good reason to suspect that unseen by you he has wilfully sprung birds, still rather give him an earnest caution than any severer rebuke. It is not easy to repair the mischief occasioned by unjust punishment. When from his sheepish look, or any other cause, you imagine that he has raised game, either through heedlessness or from their being unusually wild, be sure to give him a short lecture, and accompany him to the haunt. A lingering bird may occasionally reward you. If his manner has led you to form an incorrect opinion, your warning can have no other effect than to increase his caution—rarely an undesirable result;—and if you are right the admonition is obviously most judicious.

226. Let me caution you against the too common error of punishing a dog by pulling his ears. It has often occasioned bad canker. Some men are of opinion that it is frequently the cause of premature deafness. When you rate him you may lay hold of an ear and shake it, but not with violence.

227. I would strongly recommend you always to make your young dog “drop” for half-a-minute or so, when he sees a hare; or when he hears a bird rise.* To effect this, stand still yourself. After a few seconds you can either hie him on, or, which is yet better, get close to

* Of course, with the proviso that he is not pointing at another bird—187.

him if you expect other birds to spring. You will thus, especially in potatoes or turnips, often obtain shots at birds which would have made off, had he continued to hunt, and early in the season be frequently enabled to bag the tail-bird of a covey. This plan will also tend to make him cautious, and prevent his getting a habit of blundering-up birds, and cunningly pretending not to have noticed their escape. It will also make him less inclined to chase hares and rabbits, or rush at a fallen bird.

228. On approaching a piece of turnips, you may have heard, "Let us couple up all the dogs excepting Old Don:" the veteran's experience having shown him, that the only effect of his thundering through them would be to scare every bird and make it rise out of shot. *You*, on the contrary, when your pupil is well confirmed in his range, and has some knowledge of his distance from game, ought to wish the other dogs kept to "Heel"—especially when the seed has been broadcast,—that by the word "Care" and the right hand slightly raised you may instil into him the necessary caution and so, by judicious tuition, give him the benefit of your own experience. Most probably you would be obliged to employ the checkcord,* which I presume to be always at hand ready for occasional use. Or you might strap your shot-belt round his throat, for it is

* Lest the cord should cut the turnip-tops, it might be better to employ the elastic band spoken of in 56.

essential that he traverse such ground slowly, and greatly contract his range—see 145. The several cross scents he will encounter should afford him a valuable lesson in detecting the most recent, and in discriminating between the “heel and toe” of a run. Be patient,—give him time to work, and consider what he is about. It is probable that he will frequently overrun the birds on their doubling back, and imagine that they are gone. Should he do so, bring him again on the spot where he appeared to lose the scent. He now rushes up the adjacent drill. “Slower, slower,” signals your right arm; “go no faster than I can walk comfortably.” On the other hand, the birds may lie like stones. Not until you have remained nearly a minute alongside of him let him urge them to rise; and make him effect this, not by a sudden dash, but by steadily pressing on the scent. Bear in mind, as before warned—143—that the confidence with which he can here creep on to a near find may lead, if he is now mismanaged, to his springing on future occasions, from want of care, many a bird at which he ought to get you a shot.

229. If you can contrive it, let your pupil have some little experience in the field before you give him a *real* lesson in “Gone”—or “Flown.” Instead of being perplexed, he will then comprehend you. Should you, therefore, during the first few days of hunting him, see birds make off in lieu of taking him to the haunt—as many breakers erroneously do,—carefully keep him from the spot. You cannot let him run riot over the reeking

scent without expecting him to do the same when next he finds; and if, in compliance with your orders, he points, you are making a fool of him—there is nothing before him; and if he does not fancy you as bewildered as himself, he will imagine that the exhilarating effluvia he rejoices in is the sum total you both seek. This advice, at first sight, may appear to contradict that given in 111 and 209; but look again, and you will find that those paragraphs referred to peculiar cases. Should your young dog be loitering and sniffing at a haunt which he has *seen* birds quit, he cannot well mistake the meaning of your calling out, “Gone, gone.”

CHAPTER XII.

SHOOTING HARES. COURAGE IMPARTED.—“BACKING”
TAUGHT.

230. PROBABLY you may be in a part of the country where you may wish to kill hares to your dog's point. I will, therefore, speak about them, though I confess I cannot do it with much enthusiasm. Ah! my English friend, what far happier autumns we should spend could we but pass them in the Highlands! Then we should think little about those villanous hares. We should direct

the whole *undivided* faculties of our dogs, to work out the haunt of the noble grouse.* As for rabbits, I

* A superior dog on grouse more easily becomes good on partridge than a superior partridge-dog becomes good on grouse. Grouse run so much, both when they are pairing, and after the first flight of the young pack, that a dog broken on them has necessarily great practice in "roading,"—"roading," too, with the nose carried high to avoid strong heather—a valuable instructor,—whereas the dog broken on partridge often becomes impatient, and breaks away when he first finds grouse. The former dog, moreover, will learn not to "break fence," and the necessity of moderating his pace when hunting stubbles and turnips, sooner than the latter will acquire the extensive fast beat so desirable on heather, where he can work for hours uninterrupted by hedge, ditch, or furrow; making casts to the right and left a quarter of a mile in length. First impressions are as strong in puppyhood as in childhood; therefore the advantage of having such ground to commence on must be obvious. There are, however, favored spots in Perthshire, &c., where game so abounds that close rangers are as necessary as when hunting in England. Alas! even the grouse-dog will take far too quickly to hedge hunting and pottering when on the stubbles. It is, of course, presumed that he is broken from "chasing hare"—a task his trainer must have found difficult—though none are ever shot to him—from the few that, *comparatively* speaking, his pupil could have seen. Independently, however, of want of pace and practice in roading, it never would be fair to take a dog direct from the Lowlands to contend on the Highlands with one habituated to the latter,—and *vice versâ*, for the stranger would always be placed to great disadvantage. A *faint* scent of game which the other would instantly recognise, he would not acknowledge from being wholly unaccustomed to it. Sometimes, however, a grouse dog of a ticklish temper will not bear being constantly called to on

beg we may have no further acquaintance, if you ever even in imagination, shoot them to your young dog. Should you be betrayed into so vile a practice, you must resign all hope of establishing in him a confirmed systematic range. He will degenerate into a low potterer, —a regular hedge-hunter. In turnips he will always be thinking more of rabbits than birds. It will be soon enough to shoot the little wretches to him when he is a venerable grandfather. The youngster's noticing them—which he would be sure to do if you had ever killed one to him—might frequently lead to your mis-instructing him, by earnestly enforcing "Care" at a moment when you ought to rate him loudly with the command "Ware"—or "No." But to our immediate subject.

231. Defer as long as possible the evil day of shooting a hare over him, that he may not get too fond—65—of such vermin—I beg pardon, I mean game—and when

"breaking fence." A fine, free-ranging pointer, belonging to one of the brothers H—y, when brought to an enclosed country, became quite subdued and dispirited. He could not stand the rating he received for bounding over the hedges, and he evidently derived no enjoyment from the sport, though there were plenty of birds. On returning to the Highlands, he quite recovered his animation and perseverance. He added another to the many evidences that dogs are most attached to, and *at home* on, the kind of country they first hunted.

[This note is applicable to the pointer, used to the pinnated grouse on the Prairies, when brought into close shooting on quail, &c.]

H. W. H.

you do kill one, so manage that he may not see it put into the bag. On no account let him mouthe it. You want him to love the pursuit of feather more than of fur, that he may never be taken off the faintest scent of birds by coming across the taint of a hare. I therefore entreat you, during his first season, if you will shoot hares, to fire only at those which you are likely to kill outright; for the taint of a wounded hare is so strong that it would probably diminish his zeal, and the sensitiveness of his nose, in searching for a winged bird.

232. The temptation is always great to quit for a strong scent of hare—which any coarse-nosed dog can follow—a feeble one of birds; therefore it is a very satisfactory test of good breaking to see a dog, when he is drawing upon birds, in no way interrupted by a hare having just crossed before him. If you aim at such excellence, and it is frequently attained in the Highlands, it is certain you must not shoot hares over your youngster.

233. I hope that he will not see a hare before you have shot a few birds over him. The first that springs up near him will test the perfection to which he has attained in his initiatory lessons. Lose not a moment. It is most essential to restrain instantaneously the naturally strong impulse of the dog to run after four-footed game. Halloo out “Drop” to the extent of your voice,—raise your hand,—crack your whip,—do all you can to prevent his pursuing. Of course you will not move an inch. Should he commence running, thunder out “No,” “no.”

If, in spite of everything, he bolts after the hare, you have nothing for it but patience. It's no use to give yourself a fit of asthma by following him. You have only half as many legs as he has—a deficiency you would do well to keep secret from him as long as possible. Wait quietly where you are—for an hour if necessary. You have one consolation,—puss, according to her usual custom, has run down wind,—your dog has lost sight of her, and is, I see, with his nose to the ground, giving himself an admirable lesson in roading out a haunt. After a time he will come back looking rather ashamed of himself, conscious that he did wrong in disobeying, and vexed with himself from having more than a suspicion forced upon him, that he cannot run so fast as the hare. When he has nearly reached you, make him “drop.” Scold him severely, saying, “Ware chase”—a command that applies to the chase of birds as well as of hares.—Pull him to the place where he was when first he got a view of the hare,—make him lie down—rate him well,—call out “No,” or “Hare,” or “Ware chase,” or any word you choose, provided you uniformly employ the same. Smack the whip and punish him with it, but not so severely as you did when we assumed that he tore the bird—end of 221. You then flogged him for two offences : first, because he rushed in and seized the bird ; secondly, because he tore it and *tasted* blood. If you had not then punished him severely, you could never have expected him to be tender-mouthed. On the next occasion he might have swallowed the bird, feathers and all.

234. Should he persist in running after hares, you must employ the checkcord. If you see the hare, at which he is pointing, in its form, drive a peg firmly into the ground, and attach the cord to it, giving him a few slack yards, so that after starting off he may be arrested with a tremendous jerk. Fasten the line to the part of the spike close to the ground, or he may pull it out.

235. I have known a dog to be arrested in a headlong chase by a shot fired at him—an act which you will think yet more reprehensible than the previous mismanagement for which his owner apparently knew no other remedy than this hazardous severity.

236. When you are teaching your dog to refrain from chasing hares, take him, if you can, where they are plentiful. If they are scarce, and you are in the neighborhood of a rabbit-warren, visit it occasionally of an evening. He will there get so accustomed to see the little animals running about unpursued by either of you, that his natural anxiety to chase fur, whether it grow on the back of hare or rabbit, will be gradually diminished.

237. In Scotland there are tracts of heather where one may hunt for weeks together and not find a hare; indeed, it is commonly observed, that hares are always scarce on those hills where grouse most abound. In other parts they are extremely numerous. Some sportsmen in the Highlands avail themselves of this contrasted ground in order to break a young dog from “chasing.” They hunt him, as long as he continues fresh, where there are no hares; and when he becomes tired, they

take him to the Lowlands, where they are plentiful. By then killing a good many over him, and severely punishing him whenever he attempts to follow, a cure is often effected in two or three days. In the yet higher ranges, the mountain-hares, from possessing a peculiarly strong scent, and not running to a distance, are a severe trial to the steadiest dog.

238. Killing a sitting hare to your dog's point will wonderfully steady him from chasing; but do not fire until he has remained stanch for a considerable time. This will show him that puss is far more likely to be bagged by *your* firing than by *his* pursuing.

239. For the same object,—I mean to make your young dog stanch,—I would recommend your killing a few birds on the ground to his point were it not that you rarely have the opportunity.

240. When you have made your dog perfectly steady from chasing you may—supposing you have no retriever at hand,—naturally enough, inquire how you are to teach him to follow any hare you may be so unlucky as merely to wound. I acknowledge that the task is difficult. I would say, at once resolve to give up every wounded hare during his first season.* The following year, provided you find that he remains quite steady, on your wounding an unfortunate wretch, encourage your

* This appears extremely cruel; remember, however, that I entreated you to abstain entirely from shooting hares; but if you would not make this sacrifice, at least “only to fire at those which you were likely to kill outright”—231.

dog to pursue it by running yourself after it. When he gets hold of it, check him if he mauls it, and take it from him as quickly as possible. As I cannot suppose that you are anxious to slaughter every hare you see, let the next two or three go off without a shot. This forbearance will re-steady him, and after a while his own sagacity and nose—297—will show him that the established usage was departed from solely because puss was severely struck.

241. As you wish to flog your dog as little as possible, never go out without your whip, paradoxical as this may appear. The dog's salutary awe of the implement which he sees in your possession, like a horse's consciousness of your heel being armed with a spur, will tend to keep him in order. If your dog is a keen ranger, you may much spare the whip by making him crouch at your feet for several minutes after he has committed a fault. The detention will be felt by him, when he is all anxiety to be off hunting, as a severe punishment. If he is a mettlesome, high-couraged animal, he will regard as a yet severer punishment his being compelled to follow at your heels for half-an-hour, while the other dogs are allowed the enjoyment of hunting.

242. Excess of punishment has made many a dog of good promise a confirmed blinker; and of far more has it quenched that keen ardor for the sport, without which no dog can be first-rate. For this reason, if not from more humane motives, make it a rule to give but few cuts; let them, however, be tolerably severe. Your

pupil's recollection of them, when he hears the crack of the whip, will prevent the necessity of their frequent repetition.

243. I knew of a young fellow's purchasing a pointer of an excellent breed from a gamekeeper for a *few shillings* merely, as the animal had become so timid from over-chastisement, that she not only blinked her game, but seldom quitted the man's heels. The lad had the good sense to treat the bitch, at all times, with the greatest kindness: and in order to induce her to hunt, he used to break off the feet of every bird he killed, and give them to her to eat along with the sinews. The plan succeeded so well that she eventually became an unusually keen and fast ranger. This would be a hazardous step to take with a dog wanted to retrieve. There are few, if any dogs who may not be tempted by hunger to eat game. A gentleman told me, that, to his great astonishment, he one day saw an old tender-mouthed retriever, that he had possessed for years, deliberately swallow a partridge. Before he could get up to the dog even the tail-feathers had disappeared. On inquiry it turned out that, through some neglect, the animal had not been fed.

244. Some argue that blinking arises from a defective nose, not from punishment; but surely it is the injudicious chastisement following the blunders caused by a bad nose that makes a dog, through fear, go to "heel" when he winds birds. A bad nose may lead to a dog's running up birds from not noticing them, but it

cannot *naturally* induce him to run away from them. Possibly he may be worthless from a deficiency in his olfactory powers; but it is hard to conceive how these powers can be improved by a dread of doing mischief when he finds himself near game. Some dogs that have been unduly chastised do not even betray themselves by running to "heel," but cunningly slink away from their birds without giving you the slightest intimation of their vicinity. I have seen such instances. When a young dog, who has betrayed symptoms of blinking, draws upon birds, *head* him, if you can, before you give him the order to "toho:" he will then have such a large circuit to make, that he will feel the less tempted to run to your heels.

245. Obedience and intelligence are, as I have already remarked, best secured by judicious ratings and encouragements—scoldings for bad conduct,—praise, caresses, and rewards for good. Never forget, therefore, to have some delicacy in your pocket to give the youngster whenever he may deserve it. All dogs, however, even the most fearful, ought to be made able to bear a little punishment. If, *unfortunately*, your dog is constitutionally timid—I cannot help saying *unfortunately*, though so many of the sort have fine noses—the whip must be employed with the greatest gentleness, the lash being rather laid on the back than used, until such forbearance, and many caresses before his dismissal, have gradually banished the animal's alarm, and ultimately enabled you to give him a very slight beating, on his

misconducting himself, without any danger of making him blink. By such means, odd as it may sound, you *create* courage, and with it give him self-confidence and range.

246. A judiciously-educated dog will know as well as you do whether or not he has earned a chastisement, and many a one is of so noble a nature that he will not wish to avoid it if he is conscious that he deserves it. He will become as anxious for good sport as you are, and feel that he ought to be punished, if from his own misconduct he mars it. Indeed, he will not have much opinion of your sagacity if you do not then give him a sound rating, or let him have a taste of the lash, though it matters not how slight. Clearly this feeling, which it will be right to foster, must have arisen from his belief that you are always conscious of his actions—262—therefore never check him for coming towards you on his committing any unseen error. Moreover, when he has been but a little shot to, you will find that if you abstain from firing at a bird which through his fault he has improperly flushed, although in its flight it affords you an excellent shot, you will greatly vex him; and this will tend to make him more careful for the future.

247. When, after a few weeks, you perceive that the youngster has confidence in himself, and is likely to hunt independently, not deferentially following the footsteps of an older companion, take out a well-broken dog with him, that you may have the opportunity of teaching him to “back.” Be careful to choose one not given

to make false points; for if he commits such mistakes, your pupil will soon utterly disregard his pointing. Select also one who draws upon his birds in a fine, determined attitude; not one to whose manner even *you* must be habituated to feel certain he is on game. Be watchful to prevent your dog ever hunting in the wake of the other, which, in the humility of canine youth, he probably will, unless you are on the alert to wave him in a different direction, the moment you observe him inclined to seek the company of his more experienced associate. By selecting a slow old dog you will probably diminish the wish of the young one to follow him; for it is likely that the youngster's eagerness will make him push on faster, and so take the lead.

248. The example for a *few* days—but only for a few days—of a good stanch dog who is not a hedge-hunter, —has no bad habits, and does not require being called to—will be advantageous to your inexperienced animal.

249. On the old dog's pointing, catch the eye of the young one. If you cannot readily do so, and are not afraid of too much alarming the birds, call to the old fellow by name, and desire him to "toho." The order will make the young one look round, and awaken him to a suspicion of what is going forward. Hold up your right arm—stand still for a minute—and then, carrying your gun as if you were prepared momentarily to fire, retreat, or move sideways in crab-like fashion towards the old dog, continuing your signal to the other to

remain steady, and turning your face to him, so that he may be restrained by the feeling that your eye is constantly fixed upon him. He will soon remark the attitude of the old dog, and almost intuitively guess its meaning. Should the old one draw upon his game, still the other dog must remain stationary. If he advance but an inch, rate him. Should he rush up—which is hardly to be expected—at him at once;—having made him drop, catch hold of him, and drag him to the place at which he should have backed—there—if you judge such strong measures necessary—peg him down until after you have had your shot and are reloaded. If by heading the birds you can drive them towards the young dog, do so; and aim at the one most likely to fall near him. Endeavor to make him comprehend that any sign or word to urge on or retard the leading dog in no way applies to him. This he will soon understand, if he has been properly instructed with an associate in the initiatory lesson described in 45. After you have picked up the bird let him sniff at it.

250. It is most important that the dog which first winds birds should be allowed to “road” them to a spring without being flurried, or in any way interfered with by another dog. Few things are more trying to your temper as a sportsman, than to see a self-sufficient cub, especially when birds are wild, creep up to the old dog whom he observes pointing at a distance, or cautiously drawing upon a covey. The young whipper-snapper pays no attention to your most energetic signals: you

are afraid to speak lest you should alarm the birds, and before you can catch hold of the presumptuous jackanapes, he not only steals close to the good old dog, but actually ventures to head him; nay, possibly dares to crawl on yet nearer to the birds in the hope of enjoying a more intoxicating sniff.

251. All dogs but the "finder" should stand wholly by sight,—just the reverse of pointing. Your dog's nose ought to have nothing to do with backing. If you permit it, he will get the abominable habit of creeping up to his companions in the manner just described—250—when he observes them to be winding birds; and though he may not presume to take the lead, nay, even keep at so respectful a distance as in no way to annoy the "finder," yet a longing to inhale the "grateful steam"—as that good poet and capital sportsman, Somerville, terms it—will make him constantly watch the other dogs, instead of bestowing his undivided attention and faculties upon finding game for himself. It is quite enough if he backs whenever you order him, or he accidentally catches sight of another dog either "pointing" or "roading," and the less he is looking after his companions, the more zealously will he attend to his own duties.

252. If you have any fears that the old dog when he is on birds will not act steadily, should you have occasion to chide the young one, be careful to give the old dog a word expressive of your approval, before you commence to rate the other.

253. When your youngster is hereafter hunted in

company, should he make a point, and any intrusive companion, instead of properly backing him, be impertinently pressing on, the youngster should not be induced—however great may be the trial upon his patience and forbearance—to draw one foot nearer to the game than his own knowledge of distance tells him is correct; not even if his friend, or rather, jealous rival, boldly assumes the front rank. Your pupil will have a right to look to you for protection, and to expect that the rash intruder, however young, be *at the least* well rated.

254. It is a matter of little moment whether the “backer” attends to the “down charge,” or continues to back as long as the other dog remains at his point. It appears, however, best that he should “drop,” unless he is so near that he winds the game, when he would be rather pointing than backing—and should, consequently, behave as explained in 187;—for the fewer exceptions there are to general rules the more readily are the rules observed.

255. Should both dogs make separate points at the same moment, it is clear that neither can back the other. They must act independently—each for himself. Moreover, your firing over one should not induce the other to “down charge,” or in any way divert his attention from his own birds. He ought to remain as immovable as a statue. Some dogs, whose high courage has not been damped by over-correction, will do this from their own sagacity; but to enable you to *teach* them to behave thus steadily, game should be plentiful. When you are

lucky enough to observe both dogs pointing at the same time, let your fellow-sportsman—or your attendant—flush and fire at the birds found by the older dog, while you remain stationary near the young one, quietly but earnestly cautioning him to continue firm. When your companion has reloaded and picked up his game—and made the other dog “back,”—let him join you and knock over the bird at which your pupil is pointing. It will not be long before he—your young dog—understands what is required of him, if he has been practised—as recommended in 187—not to “down charge” when pointing unsprung birds. In short, it may be received as an axiom, that *nothing ought to make a dog voluntarily relinquish a point so long as he winds birds; and nothing but the wish to continue his point should make him neglect the “down charge” the instant he hears the near report of a gun.*

CHAPTER XIII.

HINTS TO PURCHASERS. SHEEP KILLING.

256. WHEN your dog has been properly taught the “back,” fail not to recommence hunting him alone, if it is your object to establish a perfect range.

257. Professional dog-breakers, I have remarked, almost invariably hunt too many dogs together. This arises, I suppose, from the number which they have to train; but the consequence is, that the younger dogs are spectators rather than actors, and, instead of ranging independently in search of game, are watching the manœuvres of their older associates.

258. A glimmering of knowledge may be picked up in this way; but no one will argue that it is likely to create great excellence. Doubtless the young ones will be good backers; and to the inexperienced a troop of perhaps a dozen dogs, all in chiselled form, stanchly backing an old leader, is a most imposing sight—but if the observer were to accompany the whole party for a few hours, he would remark, I will bet any money, that the same veterans would over and over again find the birds, and that the “*perfectly*” broken young ones in the rear would do nothing but “back” and “down charge.” What can they know of judicious quartering? Of obeying the signals of the hand? Of gradually drawing upon the faintest token of a scent—only perceptible to a nose carried high in the air—until they arrive at a confident point? Of perseveringly working out the foil of a slightly-winged bird, on a hot still day, to a sure “find?” Nothing, or next to nothing,—nearly all is to be taught; and yet the breaker will show off those raw recruits as perfectly drilled soldiers. Would they not have had a much better chance of really being so, if he had given a small portion of his time each day to each?

He well knows they would; but the theatrical display would not be half so magnificent. If he had truly wished to give his pupils a good systematic range, without a doubt he would have devoted one hour in the field exclusively to each dog, rather than many hours to several at once—and not have associated any together in the field until he had gained full command over each separately. And this he would have done—*because it would have tended to his interest*,—had he supposed that his dog's qualifications would be investigated by judges—by those who would insist on seeing a dog hunted singly—in order to observe his method of ranging,—or with but one companion, before they thought of definitively purchasing.

259. At the beginning of a partridge season, I unexpectedly wanted to purchase a dog. An old gamekeeper—one on whose judgment I could rely, and who, I knew, would not willingly deceive me,—saw a setter in the field that he thought would please, and accordingly sent it to my kennel. I greatly liked the looks of the animal. He quartered his ground well—was obedient to the hand—carried a high and apparently tender nose—pointed, backed, and down-charged steadily. Unquestionably he had been well broken. I thought myself in great luck, and should not have hesitated to complete the purchase, but that fortunately I had an opportunity of shooting a bird over him, when to my horror he rushed at it with the speed of a greyhound. As, in spite of all my remonstrances, shouted in the most determined

manner, he repeated this manœuvre whenever a bird fell, I returned him. I afterwards heard he had just been shot over by a party on the moors, who, no doubt, had spoilt him by their ignoble, pot-hunting propensities.

260. Had I chosen to sacrifice my shooting in order to reclaim him—which I must have done, had I too hastily concluded the purchase,—I ought to have sent home the other dogs, and proceeded, but with greater severity, much in the manner described in 220 and 222. I ought not, however, to have gone after him when first he bolted; I ought merely to have endeavored to check him with my voice, for it would have been most important to set him a good example by remaining immovable myself, and he might have misconstrued any hasty advance on my part into rivalry for possession of the bird; in short, into a repetition of one of the many scrambles to which he had recently been accustomed, and in which I feel sure he must invariably have come off victorious. I ought, when loaded, to have walked calmly up to him, and, without taking the slightest notice of the disfigured bird, have dragged him back, while loudly rating him, to the spot where he should have “down charged.” After a good flagellation—a protracted lecture—and a long delay,—the longer the better,—I ought to have made him cautiously approach the bird; and by a little scolding, and by showing him the wounds he had inflicted, have striven to make him sensible and ashamed of his enormities. Probably, too, had the birds lain well, the moment

he pointed I should have employed the checkcord* with a spike, giving him a liberal allowance of slack line—234. Had I thus treated him throughout the day, I have little doubt but that he would have become a reformed character; though an occasional outbreak might not unreasonably have been expected. See 205 to 208.

261. To create a feeling of self-dependence, obviously there is no better plan than for a considerable time to take out the dog by himself, and thus force him to trust for sport to his own unaided powers; and when he is at length hunted in company, never to omit paying him the compliment of attending to every indication he evinces of being upon birds, even occasionally to the unfair neglect of confirmed points made by the other dogs.

262. I conceive those dogs must be considered the *best* which procure a persevering sportsman most shots in a season and lose him fewest winged birds.† If you are anxious for your pupil to attain this superlative excellence,—I will repeat it, at the risk of being accused

* I am glad to say I have never had occasion to adopt so severe a remedy as the following; but I have heard of an otherwise incorrigible taste for blood being cured by a partridge pierced transversely with two knitting-pins being *adroitly* substituted for the fallen bird which the dog had been restrained by a checkcord from bolting. The pins were cut to a length somewhat less than the diameter of its body, and were fixed at right angles to one another. Several slight wires would, I think, have answered better.

† And if hares are shot to him, fewest wounded hares.

of tautology,—you must be at all times consistently strict but never severe. Make him as much as you can, your constant companion; you will thereby much develop his intelligence, and so render him a more efficient assistant in the field, for he will understand your manner better and better, and greatly increase in affection as well as observation. Many men would like so faithful an attendant. *Teach* obedience at home—to *obtain* it in the field. Consider the instantaneous “drop,” the moment he gets the signal, as all-important,—as the very key-stone of the arch that conducts to the glorious triumphs of due subordination. Notice every fault, and check it by rating, but never punish with the whip unless you judge it absolutely necessary. On the other hand, following Astley’s plan—10—reward, or at least praise, every instance of good behavior, and you will be surprised how quickly your young dog will comprehend your wishes, and how anxious he will be to comply with them. Remember that evil practices, unchecked until they become confirmed habits, or any errors in training committed at the commencement of his education, cannot be repaired afterwards without tenfold—nay, twentyfold—trouble. Never let him hunt from under your eye. Unceasingly endeavor to keep alive in him as long as possible his belief that you are intuitively aware as fully when he is out of sight as within sight of every fault he commits, whether it arise from wilfulness or mere heedlessness. This is a very important admonition. Remember, however, that the

best dogs will occasionally make mistakes when they are running down wind—especially if it blows hard,—and that there are days when there is scarcely any scent.

—Note to 128.

263. Attend most carefully to the injunction not to let your dog hunt out of sight. It is essential that you do so.

264. Notwithstanding Beckford's capital story of the hounds making a dinner of the old ram which his lordship had left in their kennel to intimidate them, if your dog be unhappily too fond of mutton or lamb of his own killing, perhaps no better cure can be *attempted*, provided you superintend the operation, than that of muzzling him, and letting a strong ram give him a butting at the time that you are administering the lash, and hallooing out "Ware" or "Sheep." But, unfortunately, this too often fails.

265. If you do not succeed, you must hang or drown him,—the latter is probably the less painful death, but a charge of shot well lodged behind the ear in the direction of the brain would be yet better. Therefore you will not mind giving him another chance for his life, though confessedly the measure proposed is most barbarous. Procure an ash-pole about five feet long. Tie one extremity of the pole to a strong ram, by the part of the horns near the forehead. To the opposite extremity of the pole attach a strong spiked collar, and strap it round the dog's throat, to the audible tune of "Ware" or "Sheep." To prevent the possibility of the cord slipping,

through each end of the pole burn a hole. The continued efforts of the ram for some hours either to free himself from his strange companion, or to attack him, will possibly so worry and punish the dog as to give him a distaste ever afterwards for anything of a woolly nature. The pole will so effectually separate these unwilling—but still too intimate—associates, that you need not muzzle the dog.

266. There is yet another remedy, which I will name, as it sounds reasonable, though I cannot speak of its merits from personal observation, never having seen it tried.

267. Wrap a narrow strip of sheep-skin, that has much wool on it, round the dog's lower jaw, the wool outwards, and fasten it so that he cannot get rid of it. Put this on him for a few hours daily and there is a chance that he will become as thoroughly disgusted as even you could wish, with every animal of the race whose coat furnished such odious mouthfuls; but prevention being better than cure, pay great attention to your dog's morals during the lambing season. Dogs not led away by evil companionship rarely commence their depredations upon sober full-grown sheep. In ninety-nine cases out of a hundred,* they have previously yielded to the great temptation of running down some

* In the remaining odd case—one out of a hundred—the propensity may be traced to the animal's belonging to a vicious stock—in short, to hereditary instinct.

frisking lamb, whose animated gambols seemed to court pursuit.

268. If ever you have fears that you may be unable to prevent a dog's breaking away to worry sheep, hunt him in a muzzle of a size that will not interfere with his breathing, and yet effectually prevent the wide extension of his jaws.

269. The killing of fowls is more easily prevented. The temptation, though equally frequent, is not so great—he will only have tasted blood, not revelled in it. Take a dead fowl—one of his recent victims, if you can procure it—and endeavor, by pointing to it, while you are scolding him, to make him aware of the cause of your displeasure. Then secure him to a post, and thrash him about the head with the bird, occasionally favoring his hide with sundry applications of a whip, and his ears with frequent repetitions of the scaring admonition, "Ware fowl," "Fowl—fowl—fowl." Whenever you afterwards catch him watching poultry, be sure to rate him.

CHAPTER XIV.

DISTINGUISHING WHISTLES. "BACKING" THE GUN. RETREAT FROM AND RESUMPTION OF POINT. RANGE UNACCOMPANIED BY GUN. HEADING RUNNING BIRDS.

A DISTINGUISHING WHISTLE FOR EACH DOG.

271. THOUGH you may have only begun to shoot last season, have you not often wished to attract the attention of one of your two dogs, and make him hunt in a particular part of the field, but for fear of alarming the birds, have been unwilling to call out his name, and have felt loath to whistle to him, lest you should bring away at the same time the other dog, who was zealously hunting exactly where you considered him most likely to find birds?

272. Again: have the dogs never been hunting close together instead of pursuing distinct beats; and has it not constantly happened, on your whistling with the view to separate them, that *both* have turned their heads in obedience to the whistle, and *both* on your signal changed the direction of their beat, but still the *two together*? And have you not, in despair of ever parting them by merely whistling and signalling, given the lucky birds—apparently in the most handsome manner, as if scorning to take any ungenerous

advantage—fair notice of the approach of the guns by shouting out the name of one of the dogs.

273. Or, if one dog was attentive to the whistle, did he not gradually learn to disregard it from observing that his companion was never chidden for neglecting to obey it?—and did not such laxity more and more confirm both in habits of disobedience?

274. I believe several of my readers will be constrained to answer these questions in the affirmative; and, further, I think their own experience will remind them of many occasions, both on moor and stubble when birds were wild, on which they have wished to attract the notice of a particular dog—perhaps running along a hedge, or pottering over a recent haunt; or hunting down wind towards marked game—by *whistling* instead of calling out his name, but have been unwilling to do so, lest the other dogs should likewise obey the shrill sound to which all were equally accustomed.

275. Now, in breaking young dogs, you could, by using whistles of dissimilar calls, easily avoid the liability of these evils; and by invariably employing a particular whistle for each dog to summon him separately to his food—29—each would distinguish his own whistle as surely as every dog knows his own master's whistle, and as hounds learn their names. Dogs not only know their own names, but instantly know by the pronunciation when it is uttered by

a stranger. To prevent mistakes, each dog's name might be marked on his own whistle. You might have two whistles, of very different sound, on one short stock. Indeed, *one* whistle would be sufficient for two dogs, if you invariably sounded the same two or three sharp short notes for one dog, and as invariably gave a sustained note for the other. Nay, the calls could thus be so diversified, that one whistle might be used for even more than two dogs.

But whatever whistle you choose to employ, be sure, both in and out of the field, to sound it softly whenever the dog is near you. Indeed, you would act judiciously to make it a constant rule, wherever he may be, *never to whistle louder than is really requisite*, otherwise—as I think I before remarked—he will, comparatively speaking, pay little attention to its summons, when, being at a distance, he hears it but faintly.

TO BACK THE GUN.

276. In shooting, especially late in the season, you will often mark down a bird, and feel assured that you stand a better chance of getting a shot at it if the dogs cease hunting whilst you approach it. You can teach your dog to do this by holding up your right hand *behind* you when you mark down a bird, saying at the same time, "Toho," in an earnest, quiet voice, and carrying your gun as if you were prepared to shoot. He will soon begin, I really must say it.

to *back you*,—for he actually will be backing you, ludicrous as the expression may sound. After a few times he will do so on the signal, without your speaking at all; and he will be as pleased, as excited, and as *stanch*, as if he were backing an old dog. Making him “drop” will not effect your object, for, besides that it in no way increases his intelligence, you may wish him to follow at a respectful distance, while you are stealing along the banks of some stream, &c. Ere long he will become as sensible as yourself that any noise would alarm the birds, and you will soon see him picking his steps to avoid the crisp leaves, lest their rustling should betray him. I have even heard of a dog whose admirable caution occasionally led him, when satisfied that his point was observed, to crawl behind a bush, or some other shelter, to screen himself from the notice of the birds.

277. The acquisition of this accomplishment—and it is easily taught to a young dog previously made steady in backing another—it should not be attempted before—will often secure you a duck, or other wary bird, which the dog would otherwise, almost to a certainty, spring out of gun-shot. If you should “*toho*” a hare, and wish to kill one, you will have an excellent opportunity of practising this lesson.

278. In America there is a singular duck, called, from its often alighting on trees, the Wood-duck. I have killed some of these beautiful, fast-flying birds, while they were seated on logs overhanging the water, which

I could not have approached within gun-shot had the dog not properly backed the gun when signalled to, and cautiously crept after me, still remaining far in the rear.

TO RETREAT FROM A POINT AND RESUME IT.

279. Amidst coppices, osiers, or broom—indeed, some times on a rough moor—you will occasionally lose sight of a dog, and yet be unwilling to call him, feeling assured that he is somewhere steadily pointing; and being vexatiously certain that, when he hears your whistle, he will either leave his point, not subsequently to resume it, or—which is far more probable—amuse himself by raising the game before he joins you. There are moments when you would give guineas if he would retreat from his point, come to you on your whistling, lead you towards the bird, and there resume his point.

280. This accomplishment—and in many places abroad its value is almost inappreciable—can be taught him, if he is under great command, by your occasionally bringing him in to your heel from a point when he is within sight and near you, and again putting him on his point. You will begin your instruction in this accomplishment when the dog is pointing quite close to you. On subsequent occasions, you can gradually increase the distance, until you arrive at such perfection that you can let him be out of sight when you call him. When he is first allowed to be out of your sight, he ought not to be far from you.

281. You may, for a moment, think that what is here recommended contradicts the axiom laid down in 255; but it is there said, that nothing ought to make a dog "*voluntarily*" leave his point. Indeed, the possession of this accomplishment, so far from being productive of any harm, greatly awakens a dog's intelligence, and makes him perceive, more clearly than ever, that the sole object for which he is taken to the field is to obtain shots for the gun that accompanies him. When he is pointing on your side of a thick hedge, it will make him understand why you call him off;—take him down wind, and direct him to jump the fence: he will at once go to the bird, and, on your encouraging him, force it to rise on your side.

282. You will practise this lesson, however, with great caution, and not before his education is nearly completed, lest he imagine that you do not wish him always to remain stanch to his point. Indeed, if you are precipitate, or injudicious, you may make him blink his game.

283. After a little experience, he will very likely some day satisfactorily prove his consciousness of your object, by voluntarily coming out of thick cover to show you where he is, and again going in and resuming his point.

TO HUNT REGULARLY FROM LEEWARD TO WINDWARD
WITHOUT THE GUN.

284. In paragraph 147 I observed, that when you are obliged, as occasionally must be the case, to enter a field to windward with your pupil, you ought to go

down to the leeward side of it, keeping him close to your heels, before you commence to hunt. After undeviatingly pursuing this plan for some time, you can, before you come quite to the bottom of the field, send him ahead—by the underhand bowler's swing of the right-hand, iv. of 119,—and, when he has reached the bottom, signal to him to hunt to the right—or left. He will be so habituated to work under your eye—130—that you will find it necessary to walk backwards—up the middle of the field,—while instructing him. As he becomes, by degrees, confirmed in this lesson, you can sooner and sooner send him ahead—from your heel—but increase the distances very gradually,—until at length he will be so far perfected, that you may venture to send him down wind to the extremity of the field—before he commences beating,—while you remain quietly at the top awaiting his return, until he shall have hunted the whole ground, as systematically and carefully as if you had accompanied him from the bottom. By this method you will teach him, on his gaining more experience, invariably to run to leeward, and hunt up to windward—crossing and re-crossing the wind—whatever part of a field you and he may enter. What a glorious consummation ! and it can be attained, but only by great patience and perseverance. The least reflection, however, will show you that you should not attempt it until the dog is perfected in his range.

285. A careful dog, thus practised, will seldom spring birds, however directly he may be running down wind.

He will pull up at the faintest indication of a scent, being at all times anxiously on the look-out for the coveted aroma.

286. Not only to the idle or tired sportsman would it be a great benefit to have a field thus beaten, but the keenest and most indefatigable shot would experience its advantages in the cold and windy weather customary in November, when the tameness of partridge-shooting cannot be much complained of; for the birds being then ever ready to take wing, surely the best chance, by fair means, of getting near them would be to intercept them between the dog and yourself.

287. Here the consideration naturally arises, whether dogs could not be *taught*—when hunting in the ordinary manner with the gun in the rear—

TO HEAD RUNNING BIRDS.

Certainly it could be done. There have been many instances of old dogs *spontaneously* galloping off, and placing themselves on the other side of the covey—which they had pointed—as soon as they perceived that it was on the run,—and by good instruction you could develope or rather excite, that exercise of sagacity.

288. If dogs are taught to “hunt from leeward to windward without the gun,” they become habituated to seeing game intercepted between themselves and their masters,—and then their spontaneously heading running birds—though undeniably evincing great intelligence—would not be very remarkable. They would

but reverse matters by placing themselves to windward of the birds while the gun was to leeward. This shows that the acquisition of that accomplishment would be a great step towards securing a knowledge of the one we are now considering. Indeed there seems to be a mutual relation between these two refinements in education, for the possession of either would greatly conduce to the attainment of the other.

289. This accomplishment—and hardly any can be considered more useful—is not so difficult to teach an intelligent dog as one might at first imagine; it is but to lift him, and make him act on a larger scale, much in the manner described in 212 and 296. Like, however, everything else in canine education—indeed, in all education—it must be effected gradually; nor should it be commenced before the dog has had a season's steadying, then practise him in heading every wounded bird, and endeavor to make him do so at increased distances. Whenever, also, he comes upon the "heel" of a covey which is to leeward of him—instead of letting him "foot" it—oblige him to quit the scent and take a circuit—sinking the wind—so as to place himself to leeward of birds. He will thereby *head the covey*, and you will have every reason to hope that after a time his own observation and intellect will show him the advantage of thus intercepting birds and stopping them when they are on the run, whether the manœuvre places him to leeward or to windward of them.

290. If you could succeed in teaching but one of

your dogs thus to take a wide sweep when he is ordered, and head a running covey before it gets to the extremity of the field—while the other dogs remain near you—you would be amply rewarded for months of extra trouble in training, by obtaining shots on days when good sportsmen, with fair average dogs, would hardly pull a trigger. And why should you not? Success would be next to certain if you could as readily place your dog exactly where you wish, as shepherds do their collies. And whose fault will it be if you cannot? Clearly not your dog's, for he is as capable of receiving instruction as the shepherd's.

291. Manifestly it would be worth while to take great pains to teach this accomplishment, for in all countries it would prove a most killing one when birds become wild; and it would be found particularly useful wherever the red-legged partridge abounds,—which birds you will find do not lie badly when the coveys are, by any means, well headed and completely broken. But there are other accomplishments nearly as useful as those already detailed; the description of them, however, we will reserve for a separate Chapter.

CHAPTER XV.

SETTER TO RETRIEVE. BLOODHOUNDS. RETRIEVERS TO
"BEAT." WOUNDED WILD FOWL RETRIEVED FIRST.

SETTER TO RETRIEVE.

292. UNDENIABLY there is some value in the extra number of shots obtained by means of highly-broken dogs; and nearly as undeniable is it that no man, who is not over-rich, will term that teaching superfluous which enables him to secure in one dog the services of two. Now, I take it for granted—as I cannot suppose you are willing to lose many head of killed game—that you would be glad to be always accompanied in the field by a dog that retrieves. Unless you have such a companion, there will be but little chance of your often securing a slightly winged bird in turnips. Indeed, in all rough shooting, the services of a dog so trained are desirable to prevent many an unfortunate hare and rabbit from getting away to die a painful, lingering death; and yet, if the possession of a large kennel is ever likely to prove half as inconvenient to you as it would to me, you would do well, according to my idea of the matter, to dispense with a regular retriever, provided you have a highly-broken setter who retrieves well.

293. I say setter rather than pointer, not on account of his more affectionate, and perhaps more docile disposition—for certainly he is less liable to sulk under punishment,—but because, thanks to his long coat, he will be able to work in any cover, and that from nature he “roads” quicker.

I must, however, plead *guilty*—for many good sportsmen will think I evince bad taste—to a predilection for setters—meaning always *cautious* setters—a partiality, perhaps, attributable to having shot more over wild, uncertain ground than in well-stocked preserves. Doubtless, in a very inclosed country, where game is abundant, pointers are preferable, far preferable,—more especially should there be a scarcity of water; but for severe and fast work, and as a servant of all work, there is nothing, I humbly conceive, like the setter. He may be, and generally is, the more difficult to break; but, when success has crowned your efforts, what a noble, enduring, sociable, attached animal you possess. I greatly, too, admire his long, stealthy, blood-like action,—for I am not speaking of the large heavy sort before which in old days whole coveys used to be netted,—and the animated waving of his stern, so strongly indicative of high breeding; though strange to say, in gracefulness of carriage, the fox, when hunting, and actually on game, far excels him. But we are again getting astray beyond our proper limits; let us keep to the subject of dog-breaking.

294. As it will be your endeavor, during your pupil's

first season, to make him thoroughly stanch and steady, I cannot advise you, as a general rule—liable, of course, to many exceptions—one of which is named in 219—to let him retrieve—by retrieve I always mean fetch—until the following year. There is another advantage in the delay. His sagacity will have shown him that the design of every shot is to bag the game—when, therefore, he has once been permitted to pick up a bird, he will be desirous of carrying it immediately to you, and will resist the temptation to loiter with it, mouthing and spoiling it; and however keenly he may have heretofore “sought dead,” he will henceforth search with redoubled zeal, from the delight he will experience in being permitted to carry his game. Moreover, the season’s shooting, without lifting, will have so thoroughly confirmed him in the “down charge,” that the increased* inclination to bolt off in search of a falling bird will be successfully resisted. If he has been taught while young to “fetch”—92, 94, &c.,—he will be so anxious to take the birds to you, that instead of there being any difficulty in teaching him this accomplishment, you will often, during his first season, have to restrain him from lifting when he is “pointing dead.” The least encouragement will make him gladly pick up the birds, and give them, as he ought, to no one but yourself.

295. You need hardly be cautioned not to let more

* “Increased:” the gratification of carrying being far greater than that of merely “pointing dead.”

than one dog retrieve the same bird. With more dogs than one the bird would, almost to a certainty, be torn; and if a dog once becomes sensible of the enjoyment he would derive in pulling out the feathers of a bird, you will find it difficult to make him deliver it up before he has in some way disfigured it. If you shoot with several dogs that retrieve, be careful always to let the dog who finds the game be the one to bring it. It is but fair that he should be so rewarded, and thus all will be stimulated to hunt with increased diligence.

296. If the dog that found the covey be not able to wind the bird you have shot, make one of the other dogs take a large circuit. The latter may thus, without interfering with the first dog, come upon the bird, should it have run far. Send him in the direction the covey has taken—the chances are great that the bird is travelling towards the same point. By pursuing this plan, obviously there will be much less chance of your losing a bird than if you allow the dogs to keep close together while searching.—See also 98.

297. Do not think that by making your setter lift—after his first season—instead of “pointing dead,” there will be any increased risk of his raising unsprung birds. The difference between the scent of dead or wounded game, and that of game perfectly uninjured, is so vast, that no steady, experienced dog will fail to point any fresh bird he may come across whilst seeking for that which is lost

As a proof of this I may mention that,

298. In North America I once saw, lying on the ground, three snipe, which a pointer, that retrieved, had regularly set one after the other, having found a couple on his way to retrieve the first, and which he afterwards brought in succession to his master, who had all the time governed the dog entirely by signs, never having been obliged to use his voice beyond saying, in a low tone, "Dead," or "Find." I remember, also, hearing of a retrieving setter that on one occasion pointed a fresh bird, still retaining in her mouth the winged partridge which she was carrying,—and of a pointer who did the same when he was bringing a hare; there must, too, be few sportsmen who will not admit that they have found it more difficult to make a dog give up the pursuit of a wounded hare than of one perfectly uninjured. I know of a sportsman's saying he felt certain that the hare his retriever was *coursing* over the moors must have been struck, although the only person who had fired stoutly maintained that the shot was a regular miss.* The owner of the dog, however, averred that this was impossible, as he never could get the discerning animal to follow

* I retain this anecdote because every one of the occurrences related has happened to myself. The first many times in the United States; the second once in the United States when my dog Chavee pointed a fresh woodcock with a dead bird in his mouth, and a winged bird under his fore paw; the last, many times in England over an old Russian setter, Charm.—H. W. H.

any kind of unwounded game; and, on the other hand, that no rating would make him quit the pursuit of *injured* running feather or fur. The retriever's speedy return with puss, conveniently balanced between his jaws, bore satisfactory testimony to the accuracy of both his own and his master's judgment.

299. Some good sportsmen maintain that a retrieving setter—or pointer—on finding a dead bird ought to point it until desired to lift it. This training they hold to be advisable, on the ground that it conduces to the dog's steadiness by diminishing his wish to run forward on seeing a bird fall; but the plan has necessarily this evil consequence, that should the setter, when searching for the dead bird, come across and point, *as he ought*, any fresh game, on your telling him to fetch it—as you naturally will—he must spring it if he attempt to obey you. Surely this would tend more to unsteady him than the habit of lifting his dead birds as soon as found? Your dog and you ought always to work in the greatest harmony—in the mutual confidence of your, at all times, thoroughly understanding each other—and you should carefully avoid the possibility of ever perplexing him by giving him any order it is out of his power to obey, however much he may exert himself. Moreover, if you teach your retrieving setter to “point dead,” you at once relinquish—surely unnecessarily?—all hope of ever witnessing such a fine display of sagacity and steadiness as has just been related in the first part of 298.

300. If you object to a setter's being taught to lift on the ground that it will make the other dogs jealous, pray remember that the argument has equal force against the employment of a regular retriever in their presence.

REGULAR RETRIEVER TO BEAT.

301. We all have our prejudices—every Englishman has a right to many. One of mine is to think a *regular* retriever positively not worth his keep for general shooting *if one of your setting dogs will retrieve well*. However, if you shoot much in cover, I admit that a regular retriever which can be worked in perfect silence, never refusing to come in when he is merely signalled to, or, if out of sight, softly whistled to, is better*—particularly when you employ beaters†—but even then he need not be the idle rascal that one generally sees—he might be broken in to hunt close to you, and give you the same service as a mute spaniel. I grant this is somewhat difficult to accomplish, for it much tends to unsteady him, but it can be effected—I have seen it—and, being practicable, it is at least worth trying; for if you succeed, you, as before—292—make one dog perform the work of two; and, besides its evident advantage in thick cover, if he accompany

* Of course, a regular retriever is absolutely necessary when a team of spaniels is hunted, none of which are accustomed to retrieve.

† Regular retrievers are never used in America except on the Chesapeake bay for fowl-shooting.—H. W. H.

you in your every-day shooting, you will thus obtain, in the course of a season, many a shot which your other dogs, especially in hot weather, would pass over. If, too, the retriever hunts quite close to you, he can in no way annoy his companions, or interfere with them, for I take it for granted he will be so obedient as to come to "heel" the instant he gets your signal.

WATER RETRIEVERS—OR WATER SPANIELS—TO RETRIEVE
WOUNDED BEFORE PICKING UP DEAD WILD FOWL.

302. This a knowing old dog will often do of his own accord ; but you must not attempt to teach a young one this useful habit until you are satisfied that there is no risk of making him blink his birds. You can then call him off when he is swimming towards dead birds, and signal to him to follow those that are fluttering away. If the water is not too deep, rush in yourself, and set him a good example by actively pursuing the runaways ; and until all the cripples that can be recovered are safely bagged, do not let him lift one of those killed outright. If very intelligent, he will before long perceive the advantage of the system, or at least find it the more exciting method, and adhere to it without obliging you to continue your aquatic excursions. For advice about water retrievers, see 81 to 85. I have placed this paragraph among the "refinements" in breaking ; but I ought, perhaps, to have entered it sooner ; for if you are fond of duck-shooting, and live in a

neighborhood where you have good opportunities of following it, you should regard this accomplishment as a necessary part of your spaniel's education.

303. In your part of the country none of these extra, or, as some will say, always superfluous accomplishments may be required ; but if you consider that a pupil of yours attaining any one of them would be serviceable, be not deterred from teaching it by the idea that you would be undertaking a difficult task. Any one of them, I was nearly saying all of them, could be taught a dog with far greater ease, and in a shorter time, than a well-established, judicious range.

304. It would be quite unreasonable to expect a regular breaker—" mark " I do not say your game-keeper—to teach your dog any of these accomplishments. He may be fully aware of the judiciousness of the system, and be sensible of its great advantages, but the many imperious calls upon his time would preclude his pursuing it in all its details. At the usual present prices, it would not pay him to break in dogs so highly.

305. In following Beckford's advice respecting your making, as far as is practicable, your dog your " constant companion," do not, however, forget that you require him to evince great diligence and perseverance in the field ; and, therefore, that his highest enjoyment must consist in being allowed to hunt.

306. Now, it seems to be a principle of nature,—of canine as well as human nature,—to feel, through life, most attachment to that pursuit, whatever it may

be, which is most followed in youth. If a dog is permitted as a youngster to have the run of the kitchen, he will be too fond of it when grown up. If he is allowed to amuse himself in every way his fancy dictates, he will think little of the privilege of hunting. Therefore, the hours he cannot pass with you—after you have commenced his education,—I am sorry to say it, but I must do so, he ought to be in his *kennel*—loose in his kennel,* not tied up; for straining at his collar would throw out his elbows, and so make him grow up bandy-legged. If, however, he must be fastened, let it be by a chain. He would soon learn to gnaw through a cord, especially if a young puppy, who, from nature, is constantly using his teeth, and thus acquire a trick that some day might prove very inconvenient were no chain at hand. You would greatly consult his comfort by having the chain attached, with a loose ring and swivel, to a spike fixed a few paces in front of his kennel, so that he could take some exercise by trotting round and round.

307. When your dog has attained some age, and hunting has become with him a regular passion, I believe you may give him as much liberty as you please without diminishing his zeal—but most carefully prevent his ever hunting alone, technically called “self-hunting.” At that advanced time of life, too, a few occasional irregu-

* Twice a day he should be allowed to run out, that he may not be compelled to adopt habits wholly opposed to his natural propensities. If he has acquired the disagreeable trick of howling when shut up, put a muzzle on him.

larities in the field may be innocuously permitted. The steadiest dogs will, at times, deviate from the usual routine of their business, sagaciously thinking that such departure from rule must be acceptable if it tends to obtain the game; and it will be advisable to leave an experienced dog to himself whenever he evinces great perseverance in spontaneously following some unusual plan. You may have seen an old fellow, instead of cautiously "roading" and "pointing dead," rush forward and seize an unfortunate winged bird, while it was making the best use of its legs after the flight of the rest of the covey—some peculiarity in the scent emitted having probably betrayed to the dog's *practised* nose that the bird was injured. When your pup arrives at such years of discrimination, you need not so vigorously insist upon a patient "down charge" should you see a winged cock-pheasant running into cover. Your dog's habits of discipline would be, I should hope, too well confirmed by his previous course of long drill for such a temporary departure from rule to effect any permanent mischief; but oh! beware of any such laxity with a *young* pupil, however strongly you may be tempted. In five minutes you may wholly undo the labor of a month. On days, therefore, when you are anxious, *coûte qui coûte*, to fill the game-bag, pray leave him at home. Let him acquire any bad habit when you are thus pressed for birds, and you will have more difficulty in eradicating it than you would have in teaching him almost any accomplishment. This reason made me

all along keep steadily in view the supposition, that you had commenced with a dog unvitiated by evil associates, either biped or quadruped ; for assuredly you would find it far easier to give a thoroughly good education to such a pupil, than to complete the tuition (particularly in his range) of one usually considered broken, and who must, in the natural order of things, have acquired some habits more or less opposed to your own system. If, as a puppy, he had been allowed to self-hunt and chase, your labor would be herculean. And inevitably this would have been your task had you ever allowed him to associate with any dog who "self-hunted." The oldest friend in your kennel might be led astray by forming an intimacy with the veriest cur, if a "self-hunter." There is a fascination in the vice—above all, in killing young hares and rabbits—that the steadiest dog cannot resist when he has been persuaded to join in the sport by some vagabond of a poacher possessing a tolerable nose, rendered keenly discerning by experience.

308. I hope that by this time we too well understand each other for you now to wonder why I think that you should not commence hunting your young dog where game is abundant. Professional breakers prefer such ground, because, from getting plenty of points, it enables them to train their dogs more quickly, and *sufficiently well* to ensure an early sale. This is *their* object, and they succeed. *My* object is that you shall establish *ultimately* great perseverance and a fine range in your young dog, let birds be ever so scarce. If you show

him too many at first, he will subsequently become easily dispirited whenever he fails in getting a point.

309. The good condition of a dog's nose is far from being an immaterial part of his conditioning, for on the preservation of its sensitiveness chiefly depends your hope of sport. If it be dry from being feverish, or if it be habituated to the villanous smells of an impure kennel, how are you to expect it to acknowledge the faintest taint of game—yet one that, if followed up by olfactory nerves in high order, would lead to a sure find? Sweetness of breath is a strong indication of health. Cleanliness is as essential as a judicious diet; and you may be assured, that if you look for excellence, you must always have your youngster's kennel clean, dry, airy, and yet sufficiently warm. The more you attend to this, the greater will be his bodily strength and the finer his nose.

In India the kennels are, of course, too hot; but in the best constructed which fell under my observation, the heat was much mitigated by the roofs being thickly thatched with grass. In England, however, nearly all kennels—I am not speaking of those for hounds—are far too cold in winter.

310. There must be *sufficient* warmth. Observe how a petted dog, especially after severe exercise, lays himself down close to the fire, and enjoys it. Do you not see that instinct teaches him to do this? and must it not be of great service to him? Why, therefore, deny him in cold weather, after a hard day's work, a

place on the hearth-rug? It is the want of sufficient heat in the kennels, and good drying and brushing after hard work, that makes sporting dogs, particularly if they are long-coated ones, suffer from rheumatism, blear eyes, and many ills that generally, but not necessarily, attend them in old age.

CONCLUSION.

311. GENTLE Reader, according to the courteous phraseology of old novels, though most probably I ought to say Brother Sportsman;—If you have had the patience to attend me through the preceding pages, while I have been describing the educational course of a dog from almost his infancy, up to maturity, I will hope that I may construe that patience into an evidence that they have afforded you some amusement, and perhaps, some useful instruction.

312. Though I may have failed in persuading you to undertake the instruction of your dogs yourself, yet I trust I have shown you how they ought to be broken in: and if you are a novice in the field, I hope I have clearly explained to you in what manner they ought to be shot over—a knowledge which no one can possess by intuition, and which you will find nearly as essential to the preservation of the good qualities of well-tutored dogs as to the education of uninformed ones.

313. I believe that all I have said is perfectly true, and, as the system which I have described advocates kind treatment of man's most faithful companion, and

his instruction with mildness rather than severity, I trust that you will be induced to give it a fair trial, and if you find it successful, recommend its adoption.

314. I dare not ask for the same favor at the hands of the generality of regular trainers—I have no right to expect such liberality. They, naturally enough, will not readily forgive my intruding upon what they consider exclusively their own domain,—and, above all, they will not easily pardon my urging every sportsman to break in his own dogs. They will, I know, endeavor to persuade their employers that the finished education which I have described is useless, or quite unattainable, without a great sacrifice of time; and that, therefore, the system which I advocate is a bad one. They will wish it to be forgotten—that I advise a gradual advance, step by step, from the A, B, C;—that accomplishments have only been recommended *after* the acquisition of essentials—never at the expense of essentials; that at any moment it is in the instructor's power to say, "I am now satisfied with the extent of my pupil's acquirements, and have neither leisure nor inclination to teach him more;"—and that they cannot suggest quicker means of imparting any grade of education, however incomplete; at least they do not—I wish they would; few would thank them more than myself.

315. Greatly vexed at the erroneous way in which I saw some dogs instructed in the north by one who from his profession should have known better, I promised, on the impulse of the moment, to write. If I could have

purchased any work which treated the subject in what I considered a judicious and perspicuous manner, and, above all, which taught by what means a *finished* education could be imparted, I would gladly have recommended the study of it,—have spared myself the trouble of detailing the results of my own observations and experience,—and not have sought to impose on any one the task of reading them. When I began the book, and even when I had finished it, I intended to put it forth without any token by which the writer might be discovered. Mr. Murray, however, forcibly represented that unless the public had some guarantee for the fidelity of the details there would be no chance of the little work being circulated, or proving useful; therefore, having written solely from a desire to assist my brother sportsmen and to show the injudiciousness of severity, with a wish that my readers might feel as keen a zest for shooting as I once possessed, and with a charitable hope that they might not be compelled to seek it in as varied climates as was my lot, I at once annexed my address and initials to the manuscript.

W. N. H.

*United Service Club,
Pall Mall.*

EDITOR'S NOTE.

IN section 299, page 643, Col. Hutchinson argues *against* a retrieving Pointer or Setter, pointing a dead bird when ordered "*find*," and not lifting it until ordered to "fetch." This is the single rule of breaking in which I wholly differ from the Colonel; but *here* I differ so widely, that I would not own a dog which did *not* point until ordered to "fetch;" and I consider that one which "fetches" without pointing, when simply ordered to "find," is worthless.

Col. Hutchinson argues that there is a difference in the scent of a wounded and an unwounded bird, which enables a dog certainly to discriminate between the two, so that he may be trusted to point all the live birds he may meet in the way to find his dead bird, and yet to rush upon the latter and pick him up without making any pause. On the other hand, he argues as if there were *no* difference in the scent of the two, when he says that if the dog be taught to point until ordered to "fetch," and chance to point a live bird before finding the dead, he will *flush* the live bird on being ordered to "fetch" the dead. I admit that there *is* a difference of scent at all times to the best nosed dogs, but very faint, even to the best, in bad scenting weather; but that difference will more easily make the dog refuse to flush a live bird, i. e. he do point before fetching, than make him pause to point a live one, if allowed to rush in upon dead ones. The only rule that will keep a dog always up to his business is, that he shall always "*point*" every game bird or animal he comes upon, dead or living, and always "*drop*," when it runs or rises, whether a shot be fired or not. I have always shot over dogs broken to point

before fetching. I have often been deceived in supposing a fresh bird newly pointed to be the killed one, but have always found my dogs to hesitate so distinctly, before obeying the order to "*fetch*," as to make it evident that I was in error, and allow me to correct it.

For the better comprehension of the above admirable treatise on breaking, I wish to add, for the benefit of the American sportsmen, that, wherever Col. Hutchinson speaks of the partridge, it is the English bird which he intends, which, in its habits, is closely analogous to our quail; and that all his precepts as to breaking on partridge hold good precisely for the quail with us. In the same way all his precepts for grouse-shooting apply, letter for letter, to our prairie-fowl-shooting; and his precepts for pheasant-shooting to the hunting and shooting of our ruffed grouse, called in the northern states the partridge, and in the southern and western the pheasant. When he speaks of the rabbit as distinct from the hare, he alludes to a European animal which does not exist in America, the original stock of the tame rabbit, which has the habit of burrowing in the ground and dwelling in great communities, known as warrens. We have two kinds of hare, the small one commonly known as the rabbit, and the large Canadian hare, which turns white in winter; but no genuine rabbit. Hutchinson's rules as to breaking, in regard to the English hares and rabbits, hold good of both our varieties.

I will only say farther, that when he speaks of shooting in turnips or potatoes, we may apply his rules to any tall-growing vegetable covert, such as clover, rag weed, wild meadow-grass, or the like, those crops not being so extensively cultivated with us as to be haunted in general by game. Similarly, when he mentions breaking spaniels to gorse, we may substitute hollies, black-brush, cat-briers, and any other thorny covert common in any section of the country; but, in fact, no especial breaking is needed with us, as we have no brake which exactly compares with furze.

H. W. H.

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